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* * * * * Welcome to STN International * * * * *

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NEWS	2	OCT 04	Precision of EMBASE searching enhanced with new chemical name field
NEWS	3	OCT 06	Increase your retrieval consistency with new formats or for Taiwanese application numbers in CA/CAPLUS.
NEWS	4	OCT 21	CA/CAPLUS kind code changes for Chinese patents increase consistency, save time
NEWS	5	OCT 22	New version of STN Viewer preserves custom highlighting of terms when patent documents are saved in .rtf format
NEWS	6	OCT 28	INPADOCDB/INPAFAMDB: Enhancements to the US national patent classification.
NEWS	7	NOV 03	New format for Korean patent application numbers in CA/CAPLUS increases consistency, saves time.
NEWS	8	NOV 04	Selected STN databases scheduled for removal on December 31, 2010
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NEWS	13	DEC 18	ReaxysFile available on STN
NEWS	14	DEC 21	CAS Learning Solutions -- a new online training experience
NEWS	15	DEC 22	Value-Added Indexing Improves Access to World Traditional Medicine Patents in CAPLUS
NEWS	16	JAN 24	The new and enhanced DPCI file on STN has been released
NEWS	17	JAN 26	Improved Timeliness of CAS Indexing Adds Value to USPATFULL and USPAT2 Chemistry Patents
NEWS	18	JAN 26	Updated MeSH vocabulary, new structured abstracts, and other enhancements improve searching in STN reload of MEDLINE
NEWS	19	JAN 28	CABA will be updated weekly
NEWS	20	FEB 23	PCTFULL file on STN completely reloaded
NEWS	21	FEB 23	STN AnaVist Test Projects Now Available for Qualified Customers
NEWS	22	FEB 25	LPCI will be replaced by LDPCI
NEWS	23	MAR 07	Pricing for SELECTing Patent, Application, and Priority Numbers in the USPAT and IFI Database Families is Now Consistent with Similar Patent Databases on STN

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AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011.

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FILE 'HOME' ENTERED AT 15:58:57 ON 21 MAR 2011

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FULL ESTIMATED COST	0.23	0.23

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STRUCTURE FILE UPDATES: 20 MAR 2011 HIGHEST RN 1268954-09-1
DICTIONARY FILE UPDATES: 20 MAR 2011 HIGHEST RN 1268954-09-1

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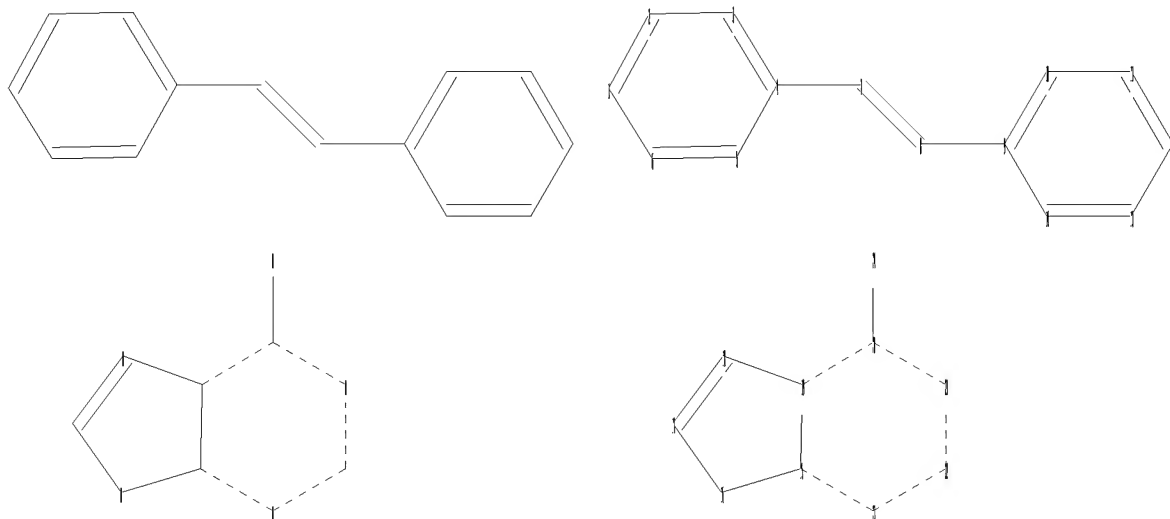
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ring nodes :
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ring bonds :
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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:Atom 10:Atom
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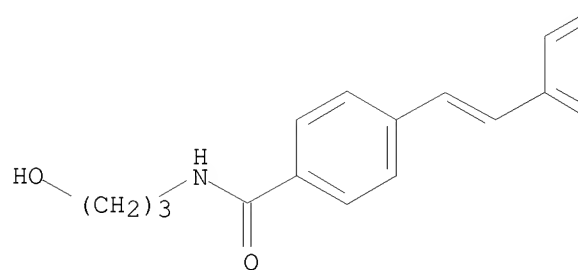
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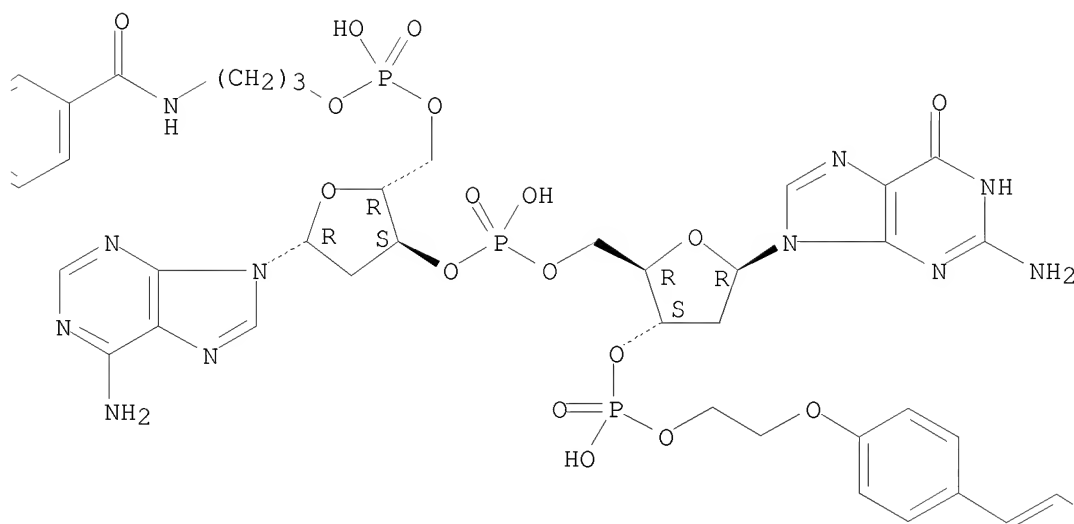
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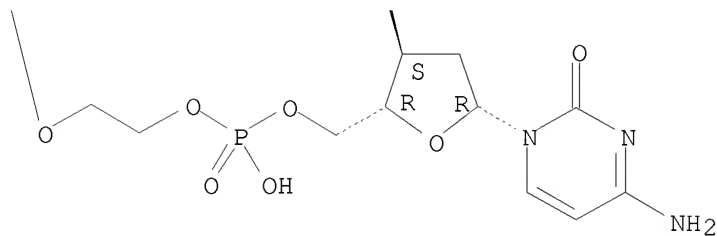
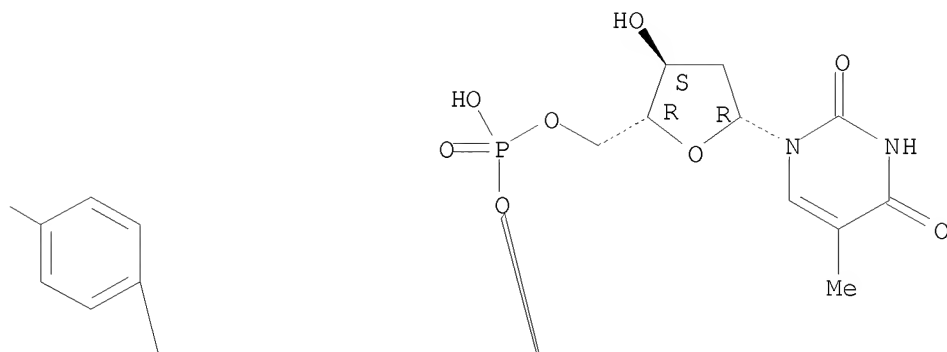
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PAGE 1-B





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FILE 'REGISTRY' ENTERED AT 15:59:09 ON 21 MAR 2011

L1 STRUCTURE UPLOADED

L2 143 S L1 FULL

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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FILE LAST UPDATED: 20 Mar 2011 (20110320/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2011
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2011

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

CAS Information Use Policies apply and are available at:

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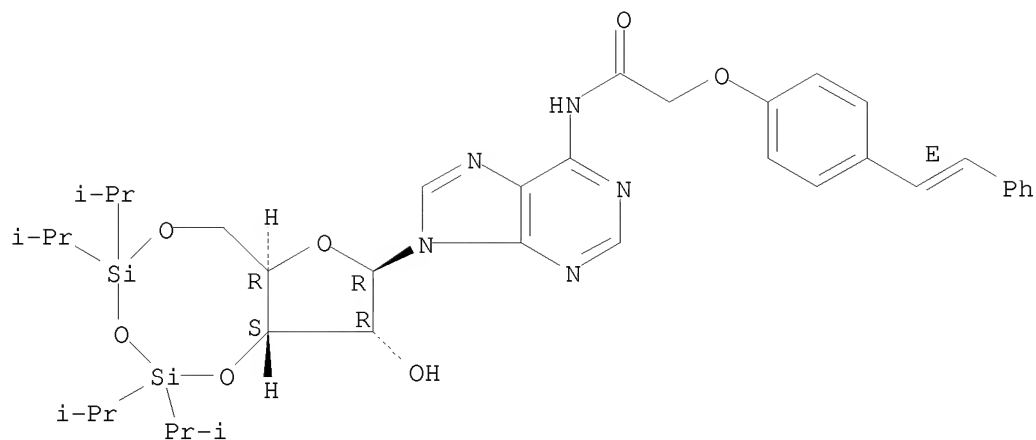
This file contains CAS Registry Numbers for easy and accurate substance identification.

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L3      17 L2 AND PY<=2004
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L3  ANSWER 1 OF 17  CAPLUS  COPYRIGHT 2011 ACS on STN
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    RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
      preparation); PREP (Preparation); RACT (Reactant or reagent)
      (preparation of stilbene nucleoside phosphoramidites as synthon for nucleic
      acid arrays)
RN  773894-97-6  CAPLUS
CN  Adenosine, N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]-3',5'-O-[1,1,3,3-
    tetrakis(1-methylethyl)-1,3-disiloxanediyl]- (9CI)  (CA INDEX NAME)
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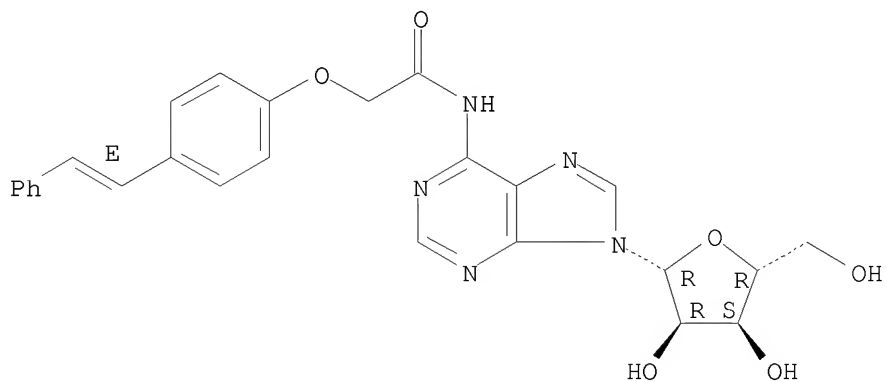
Absolute stereochemistry.
Double bond geometry as shown.



RN 773895-04-8 CAPLUS

CN Adenosine, N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

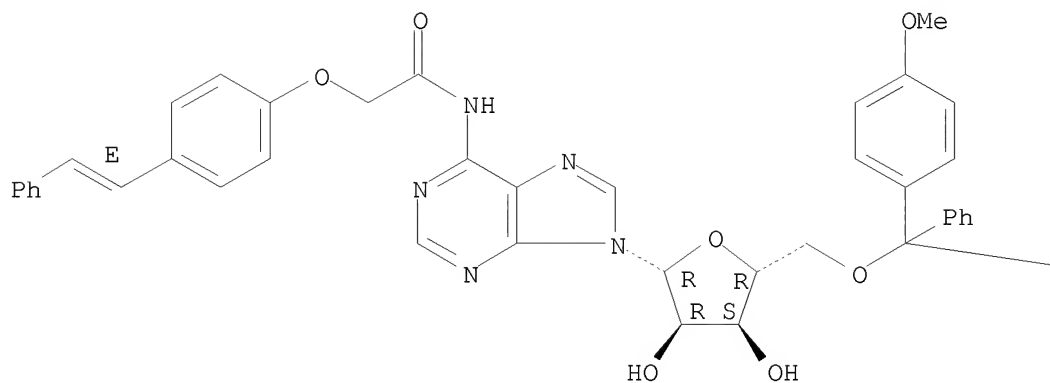


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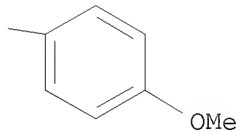
CN Adenosine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



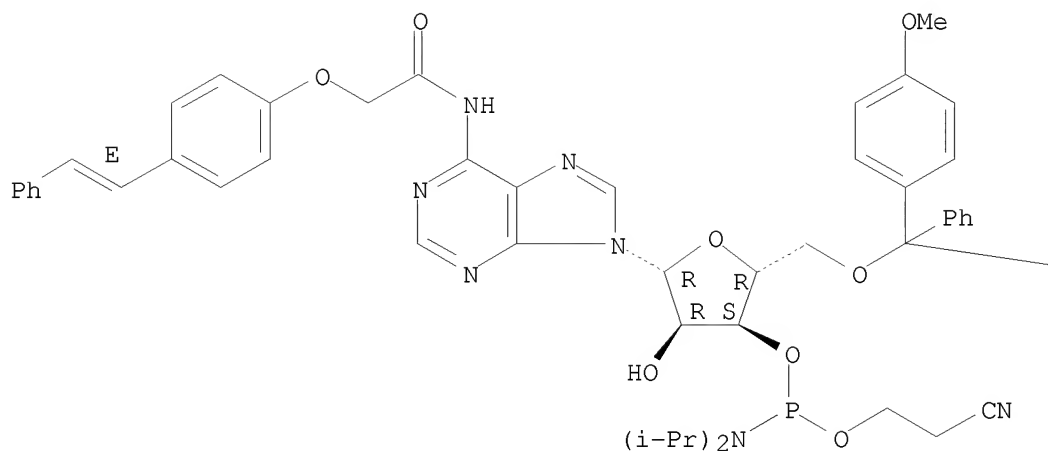
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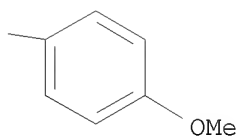
IT 773895-12-8P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
(Preparation)
(preparation of stilbene nucleoside phosphoramidites as synthon for nucleic acid arrays)
RN 773895-12-8 CAPLUS
CN Adenosine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]-, 3'-[2-cyanoethyl bis(1-methylethyl)phosphoramidite] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



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(FILE 'HOME' ENTERED AT 15:58:57 ON 21 MAR 2011)

FILE 'REGISTRY' ENTERED AT 15:59:09 ON 21 MAR 2011

L1 STRUCTURE UPLOADED

L2 143 S L1 FULL

FILE 'CAPLUS' ENTERED AT 16:00:18 ON 21 MAR 2011

L3 17 S L2 AND PY<=2004

=> d ibib abs hitstr 1-17

L3 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:837289 CAPLUS

DOCUMENT NUMBER: 141:332413

TITLE: Preparation of stilbene nucleoside phosphoramidites as
synthon for nucleic acid arrays

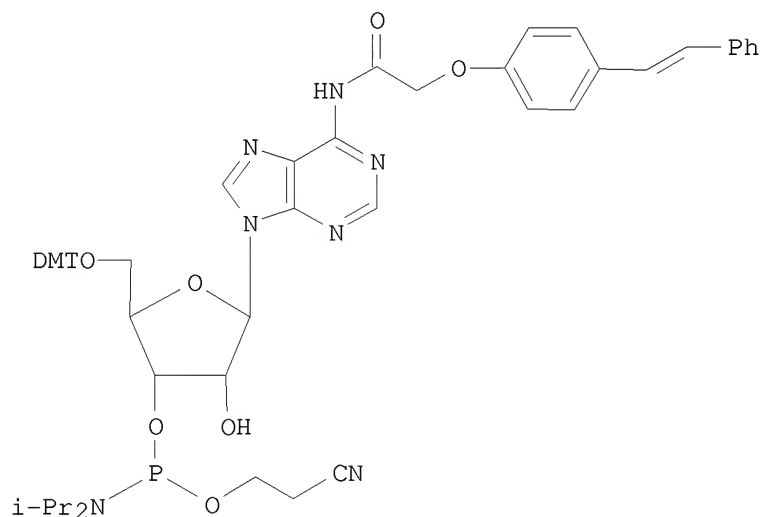
INVENTOR(S): Mauritz, Ralf; Heindl, Dieter

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.; Roche Diagnostics
G.m.b.H.

SOURCE: Eur. Pat. Appl., 19 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1466663	A1	20041013	EP 2004-6597	20040318 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
US 20040235022	A1	20041125	US 2004-802249	20040317 <--
CA 2461405	A1	20040919	CA 2004-2461405	20040318 <--
JP 2004340931	A	20041202	JP 2004-78550	20040318 <--
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PRIORITY APPLN. INFO.:			EP 2003-6098	A 20030319
OTHER SOURCE(S):			MARPAT 141:332413	

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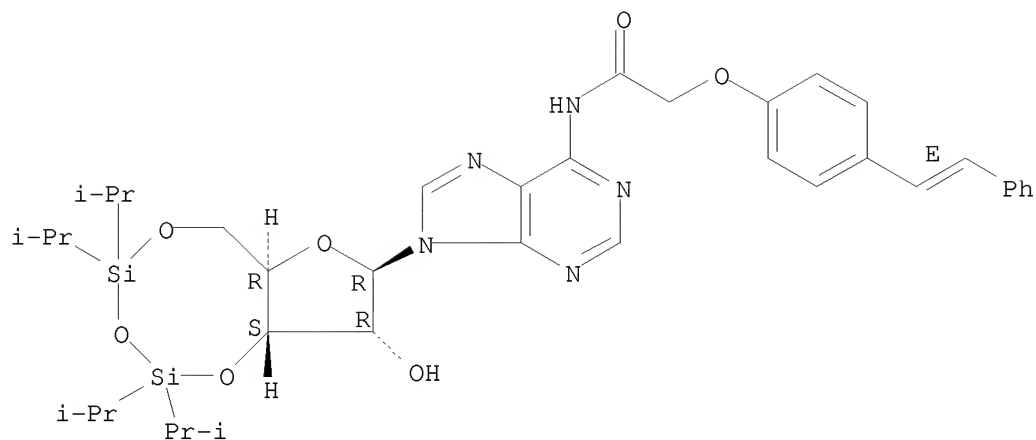
AB The invention relates to a quality control method for manufacturing biopolymer arrays comprising the use of detectable protecting groups. Thus, nucleoside phosphoramidite I was prepared from 4-hydroxystilbene via coupling with adenosine derivative as synthon for nucleic acids.

IT 773894-97-6P 773895-04-8P 773895-09-3P
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of stilbene nucleoside phosphoramidites as synthon for nucleic acid arrays)

RN 773894-97-6 CAPLUS

CN Adenosine, N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]-3',5'-O-[1,1,3,3-tetrakis(1-methylethyl)-1,3-disiloxanediyl]- (9CI) (CA INDEX NAME)

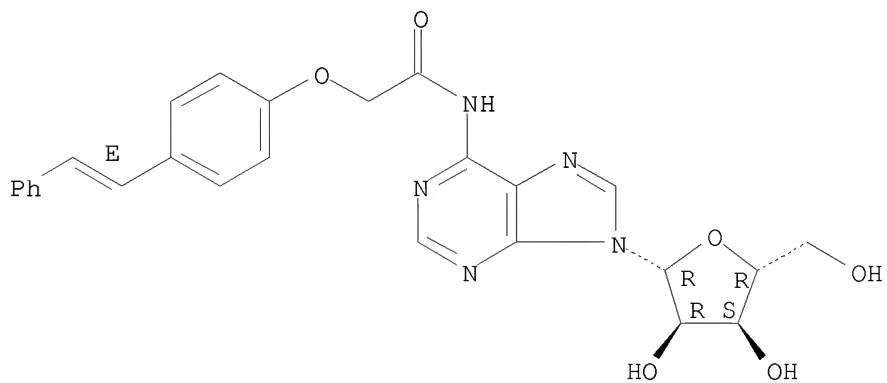
Absolute stereochemistry.
 Double bond geometry as shown.



RN 773895-04-8 CAPLUS

CN Adenosine, N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

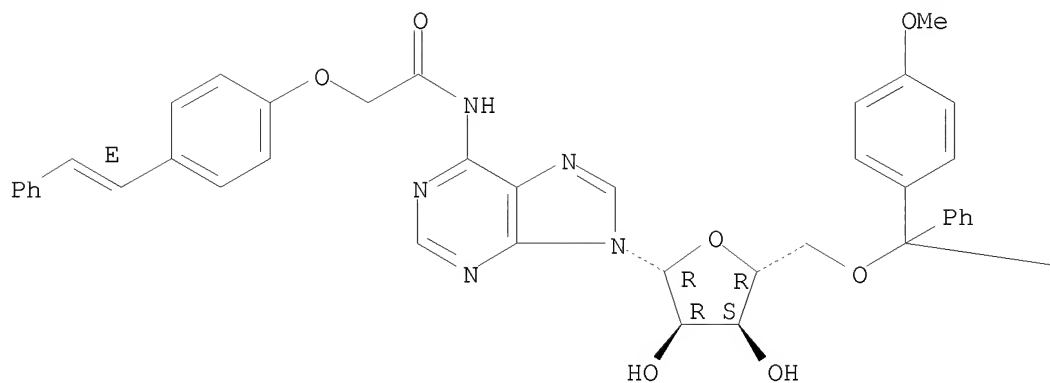


RN 773895-09-3 CAPLUS

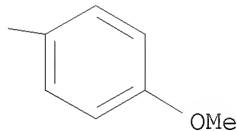
CN Adenosine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



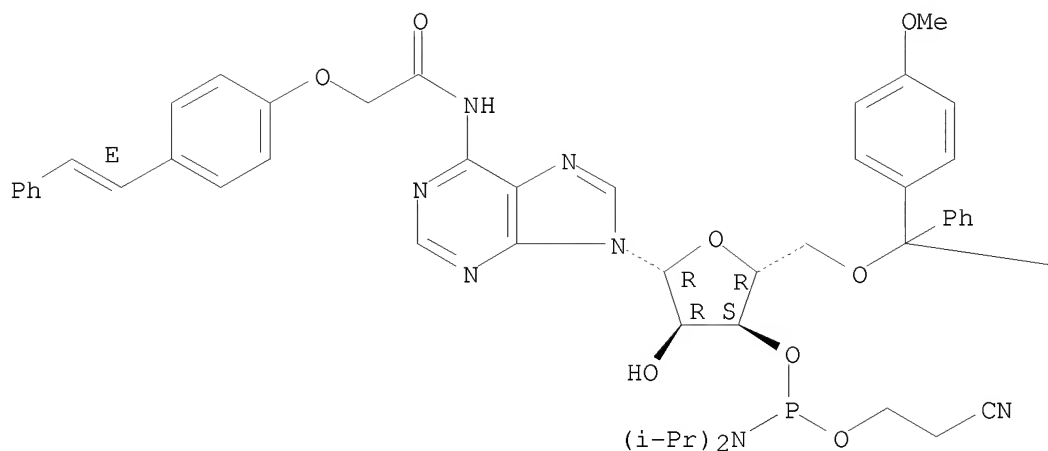
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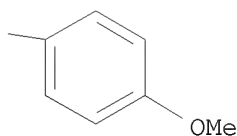
IT 773895-12-8P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
(Preparation)
(preparation of stilbene nucleoside phosphoramidites as synthon for nucleic acid arrays)
RN 773895-12-8 CAPLUS
CN Adenosine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-N-[[4-[(1E)-2-phenylethenyl]phenoxy]acetyl]-, 3'-[2-cyanoethyl bis(1-methylethyl)phosphoramidite] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:471235 CAPLUS

DOCUMENT NUMBER: 141:186529

TITLE: DNA-Mediated Exciton Coupling and Electron Transfer between Donor and Acceptor Stilbenes Separated by a Variable Number of Base Pairs

AUTHOR(S): Lewis, Frederick D.; Wu, Yansheng; Zhang, Ligang; Zuo, Xiaobing; Hayes, Ryan T.; Wasielewski, Michael R.

CORPORATE SOURCE: Department of Chemistry, Northwestern University, Evanston, IL, 60208-3113, USA

SOURCE: Journal of the American Chemical Society (2004), 126(26), 8206-8215

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis, steady-state spectroscopy, and transient absorption spectroscopy of DNA conjugates possessing both stilbene electron donor and electron acceptor chromophores are described. These conjugates are proposed to form nicked DNA dumbbell structures in which a

stilbenedicarboxamide acceptor and stilbenediether donor are separated by variable nos. of A-T or G-C base pairs. The nick is located either adjacent to one of the chromophores or between two of the bases. Thermal dissociation profiles indicate that stable structures are formed possessing as few as two A-T base pairs. CD spectra in the base pair region are characteristic of B-DNA duplex structures, whereas CD spectra at longer wavelengths display two bands attributed to exciton coupling between the two stilbenes. The sign and intensity of these bands are dependent upon both the distance between the chromophores and the dihedral angle between their transition dipoles [$\Delta\epsilon \approx Rda-2 \sin(2\theta)$].

Pulsed laser excitation of the stilbenediamide results in creation of the acceptor-donor radical ion pair, which decays via charge recombination. The dynamics of charge separation and charge recombination display an exponential distance dependence, similar to that observed previously for systems in which guanine serves as the electron donor. Unlike exciton coupling between the stilbenes, there is no apparent dependence of the charge-transfer rates upon the dihedral angle between donor and acceptor stilbenes. The introduction of a single G-C base pair between the donor and acceptor results in a change in the mechanism for charge separation from single step superexchange to hole hopping.

IT 733047-10-4 733047-11-5 733047-12-6

RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); BIOL (Biological study); PROC (Process)

(CD spectra and photoinduced electron transfer dynamics in modified DNA hairpin conjugates containing stilbenedicarboxamide electron acceptor and stilbenediether electron donor)

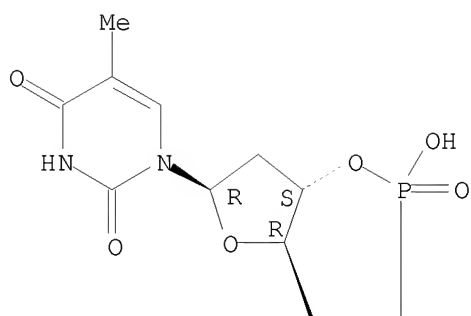
RN 733047-10-4 CAPLUS

CN Thymidine, thymidylyl-(3'→5')-thymidylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediylxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyloxy-1,2-ethanediyloxy-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenyleneoxy-1,2-ethanediyloxyphosphinico-(3'→3')-thymidylyl-(5'→3')- (9CI)
(CA INDEX NAME)

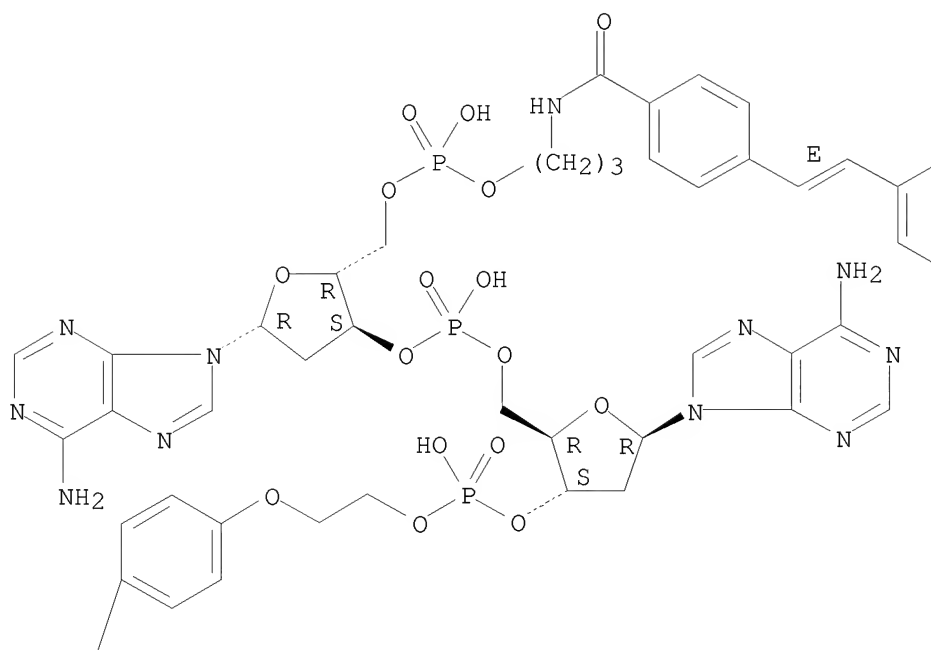
Absolute stereochemistry.

Double bond geometry as shown.

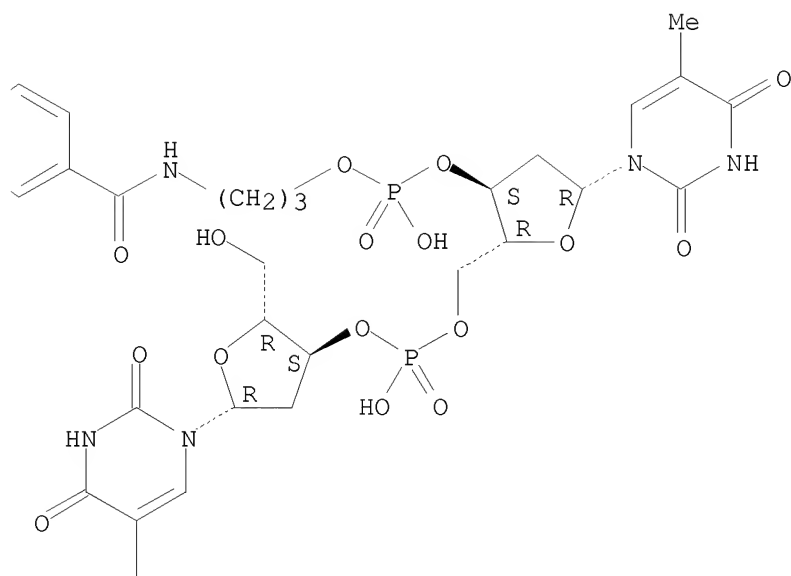
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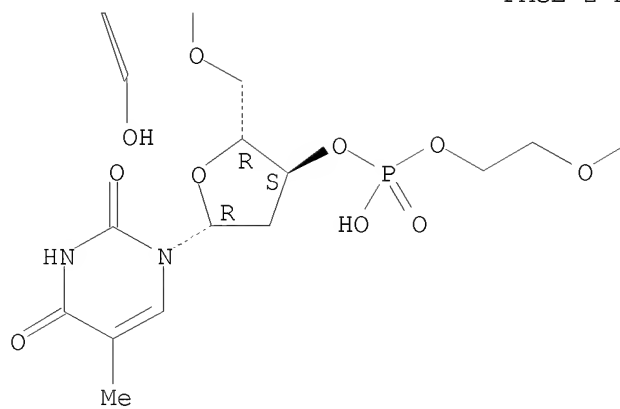
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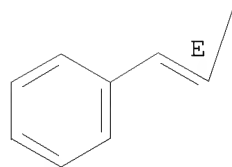
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PAGE 2-A



PAGE 2-B

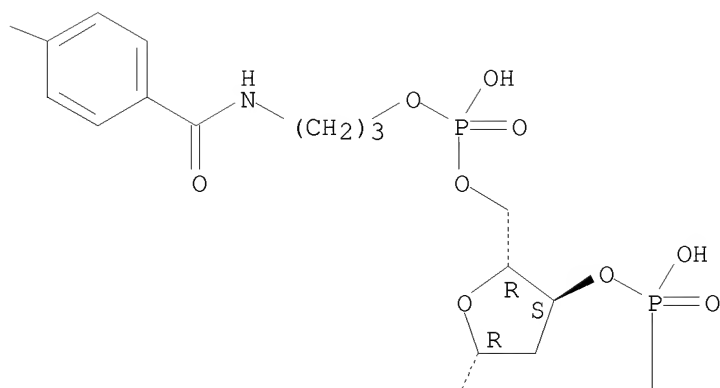
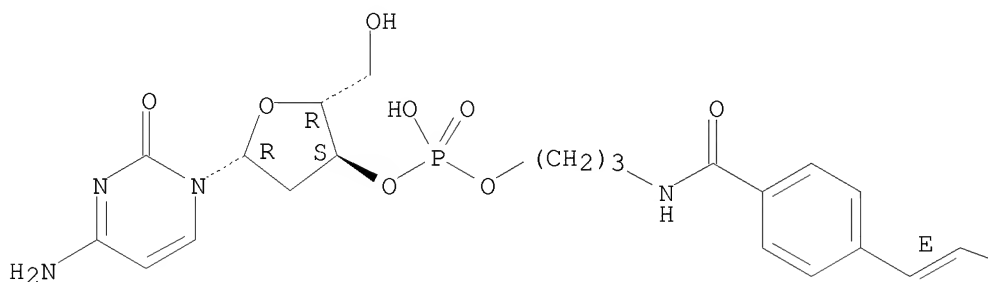


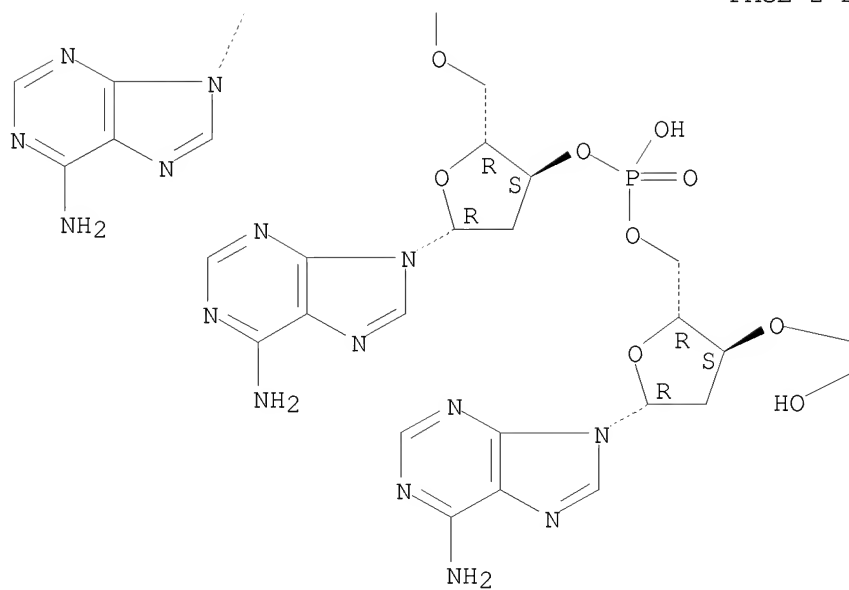


RN 733047-11-5 CAPLUS

CN Adenosine, 2'-deoxycytidylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediylxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyloxy-1,2-ethanediyloxy-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenyleneoxy-1,2-ethanediyloxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

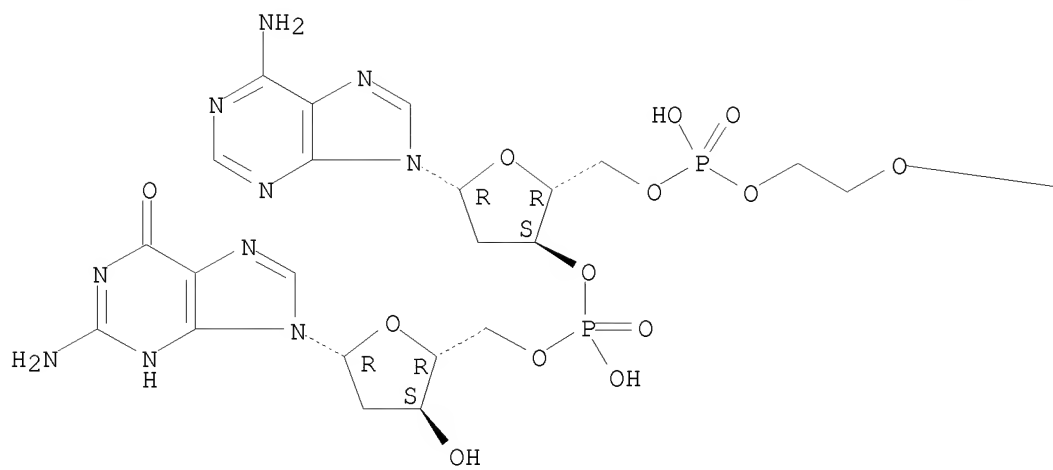




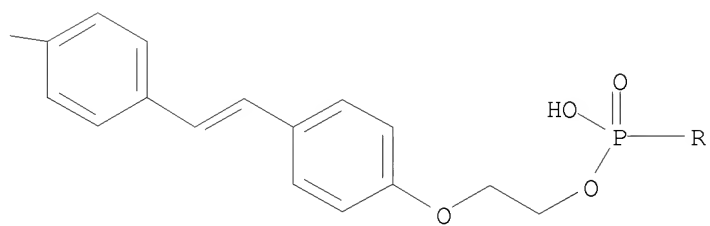
CN	Guanosine, 2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-thymidyl-(3'→5')-thymidyl-(3'→5')-2'-deoxycytidyl-(3'→5')-thymidyl oxy-1,2-ethanediyloxy-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenyleneoxy-1,2-ethanediyloxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-	(9CI)	(CA INDEX NAME)
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Absolute stereochemistry.
Double bond geometry as shown.

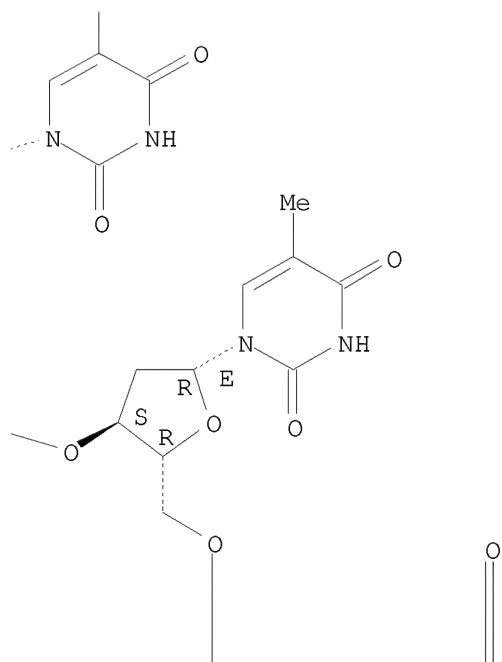
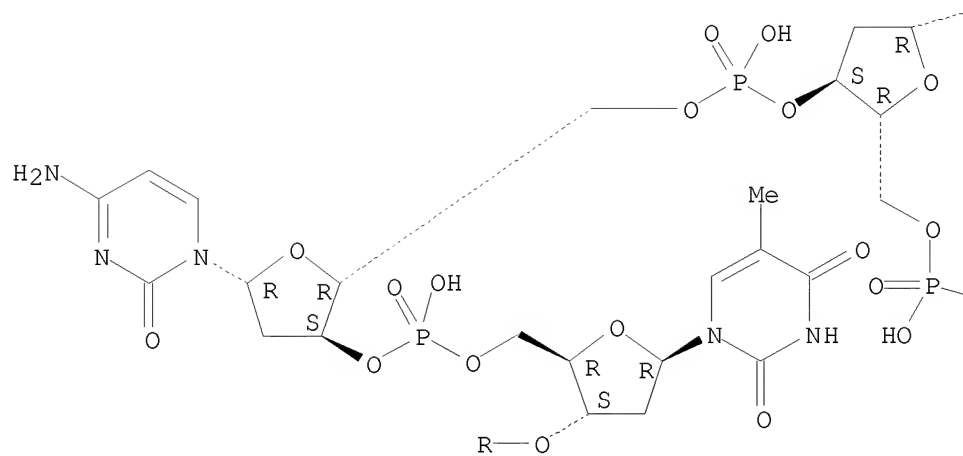
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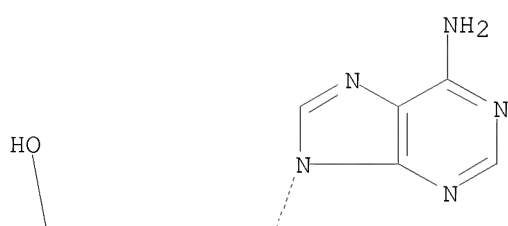
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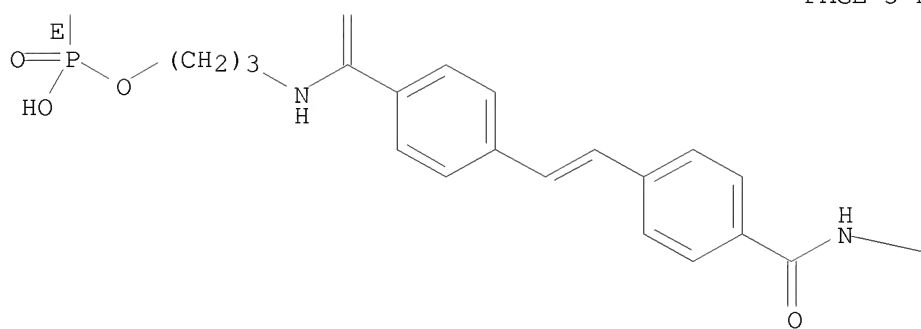
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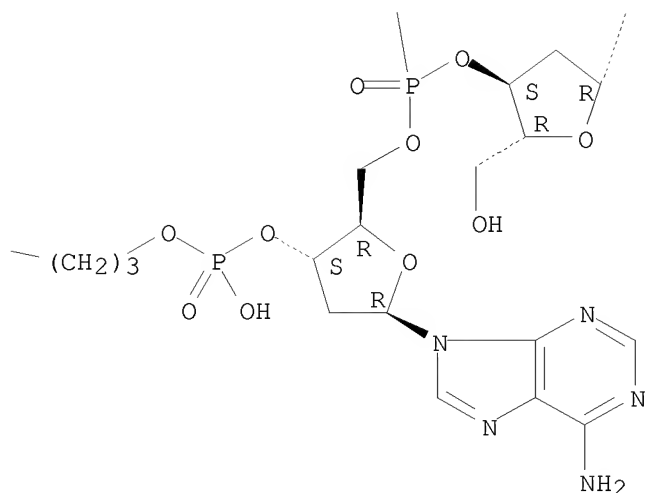


PAGE 2-C



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OS.CITING REF COUNT: 40 THERE ARE 40 CAPLUS RECORDS THAT CITE THIS RECORD (41 CITINGS)
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L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:248335 CAPLUS

DOCUMENT NUMBER: 140:419464

TITLE: 5'-Tethered Stilbene Derivatives as Fidelity- and Affinity-Enhancing Modulators of DNA Duplex Stability

AUTHOR(S): Dogan, Zeynep; Paulini, Ralph; Stuetz, Jan A. Rojas; Narayanan, Sukunath; Richert, Clemens

CORPORATE SOURCE: Institute for Organic Chemistry, University of Karlsruhe (TH), Karlsruhe, D-76131, Germany

SOURCE: Journal of the American Chemical Society (2004), 126(15), 4762-4763

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of 5'-linked stilbene-DNA conjugates with different substituents in the distal aromatic ring of the stilbene was prepared, and the effect of the modifications on duplex stability was determined via UV-melting curves. A trimethoxystilbene derivative as a 5'-substituent increases duplex m.ps. by up to 12.2 °C per modification. With this alkoxystilbene substituent, terminal mismatches in DNA duplexes lower the m.p. by up to 23.4 °C over the perfectly matched control, whereas terminal mismatches in unmodified DNA cause m.p. depressions of no more than 6.1 °C. An aminomethylstilbene substituent linked to an oligopyrrolamide minor groove binder increases the m.p. of an all-A/T decamer by up to 32.7 °C, thus shifting the m.p. into a range typical for duplexes with statistical G/C-content. An affinity- and selectivity-enhancing effect was also observed when the trimethoxystilbene cap was employed on a small DNA microarray. The phosphoramidite of the trimethoxystilbene can be readily employed in automatic DNA synthesis, facilitating the generation of DNA chips with improved fidelity.

IT	1007858-31-2	1007858-34-5	1007858-39-0
	1007858-77-6	1007858-85-6	1007858-95-8
	1007860-63-0	1007860-74-3	1007860-82-3
	1007860-91-4	1007860-96-9	1007861-00-8
	1007861-04-2	1007861-11-1	

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(5'-tethered stilbene derivs. act as fidelity- and affinity-enhancing
modulators of DNA duplex stability)

RN 1007858-31-2 CAPLUS

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxy-, complex with
5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxycytidine (1:1) (CA INDEX NAME)

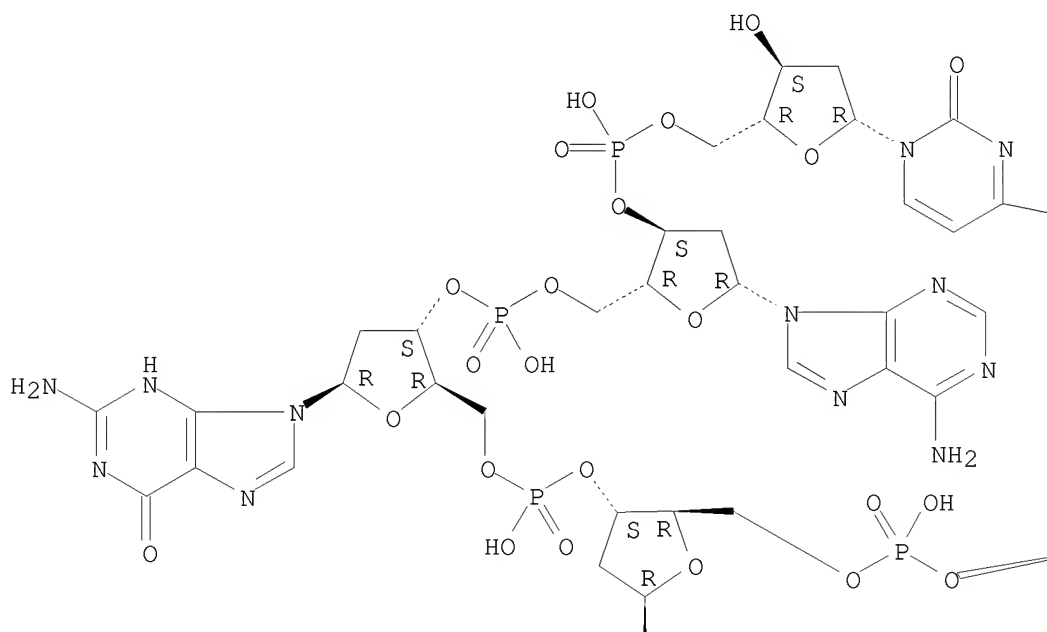
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CRN 1007858-30-1

CMF C100 H124 N30 O55 P8

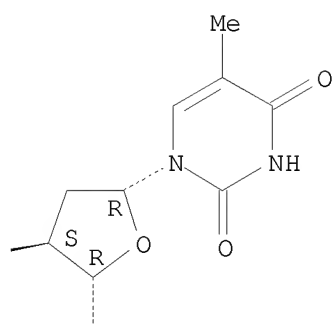
Absolute stereochemistry.
Double bond geometry as shown.

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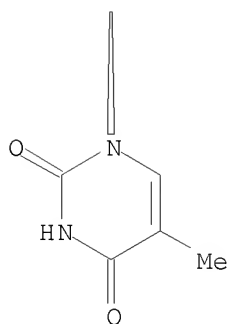


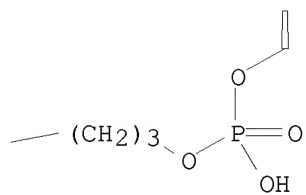
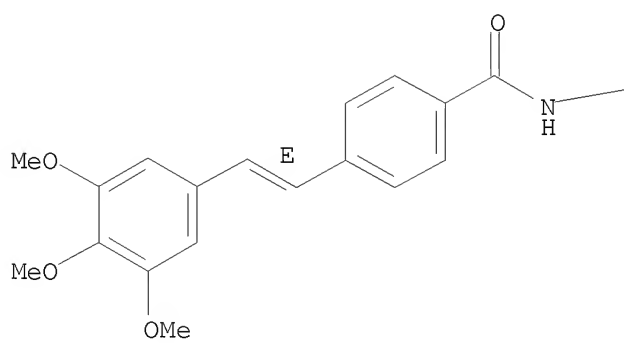
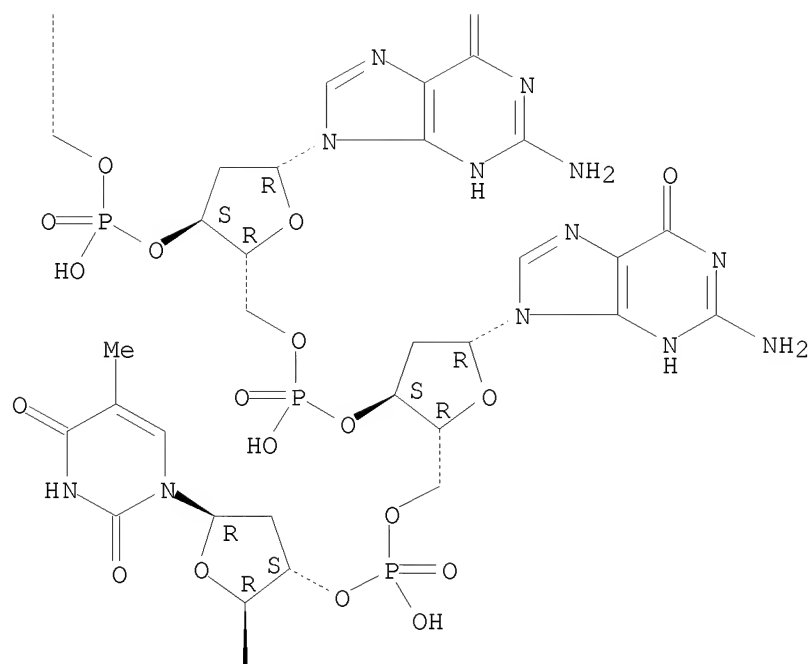
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NH₂



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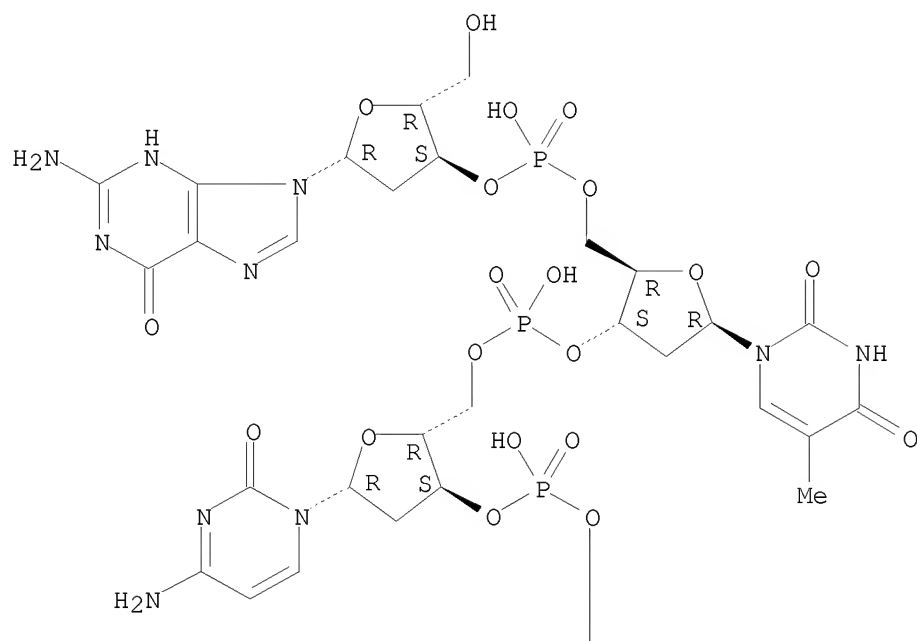
CM 2

CRN 254745-34-1

CMF C78 H98 N33 O43 P7

Absolute stereochemistry.

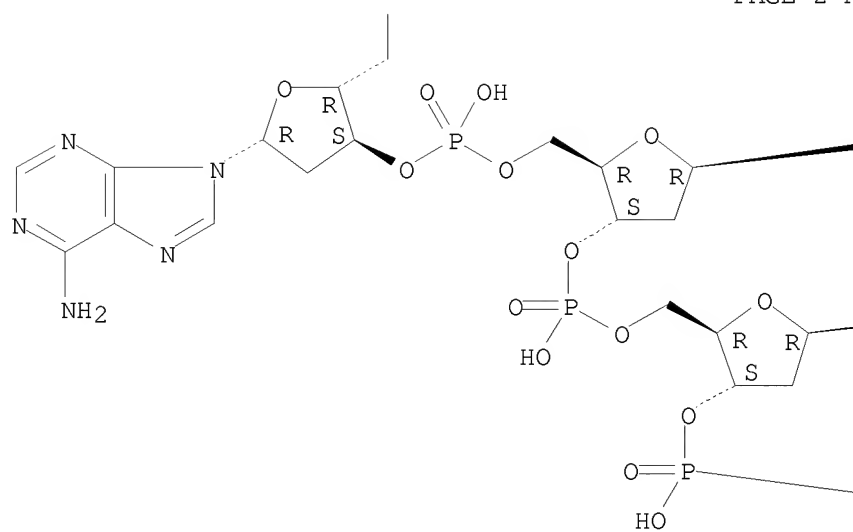
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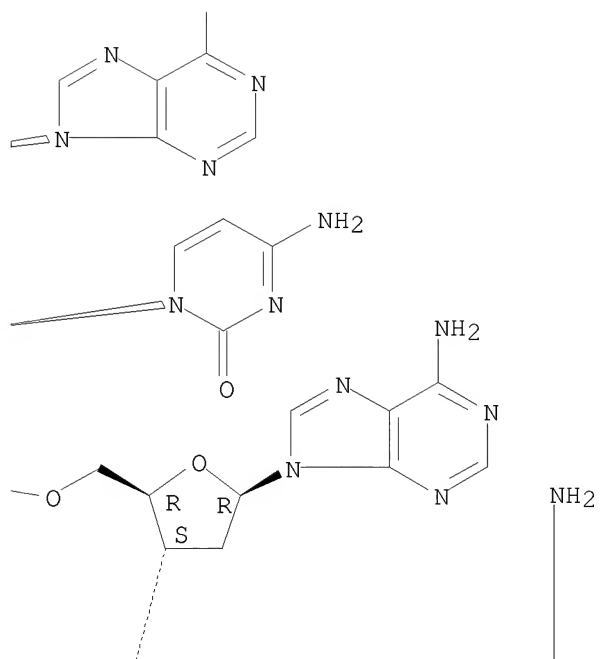
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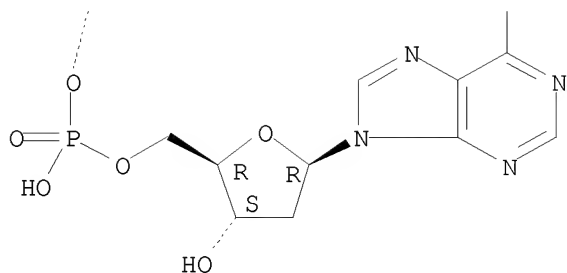
NH₂

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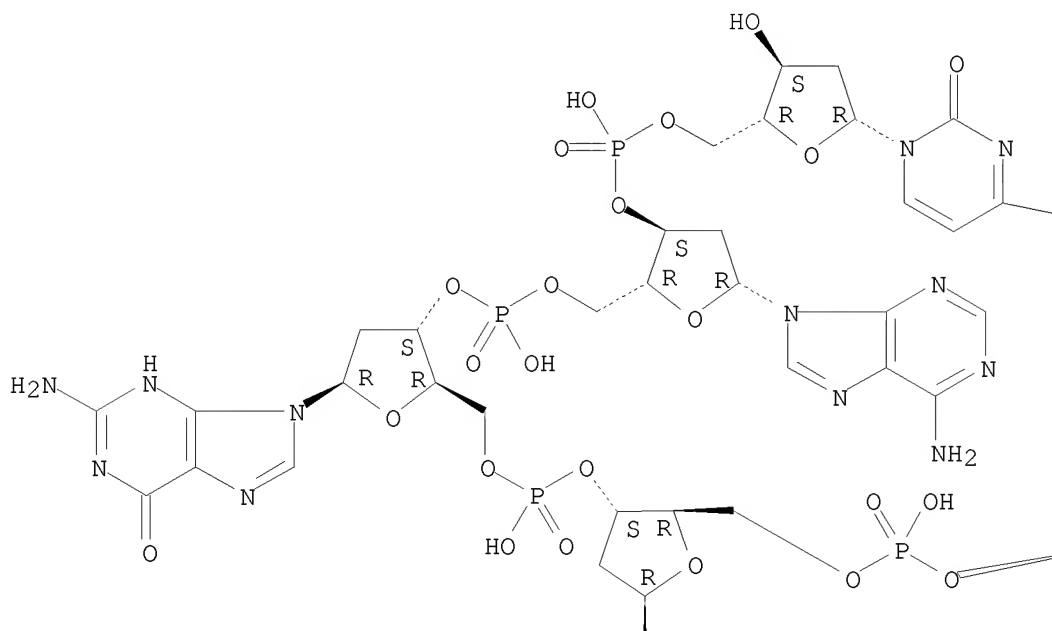


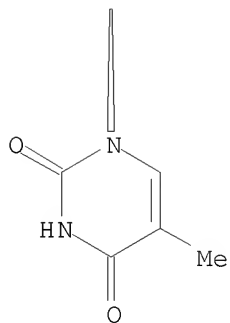
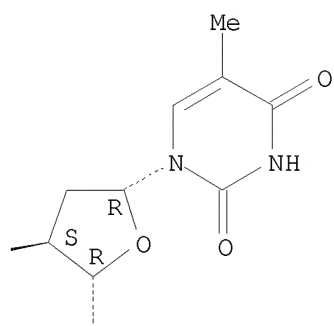
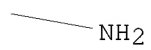
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 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxy-, complex with
 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
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 deoxycytidine (1:1) (CA INDEX NAME)

CM 1

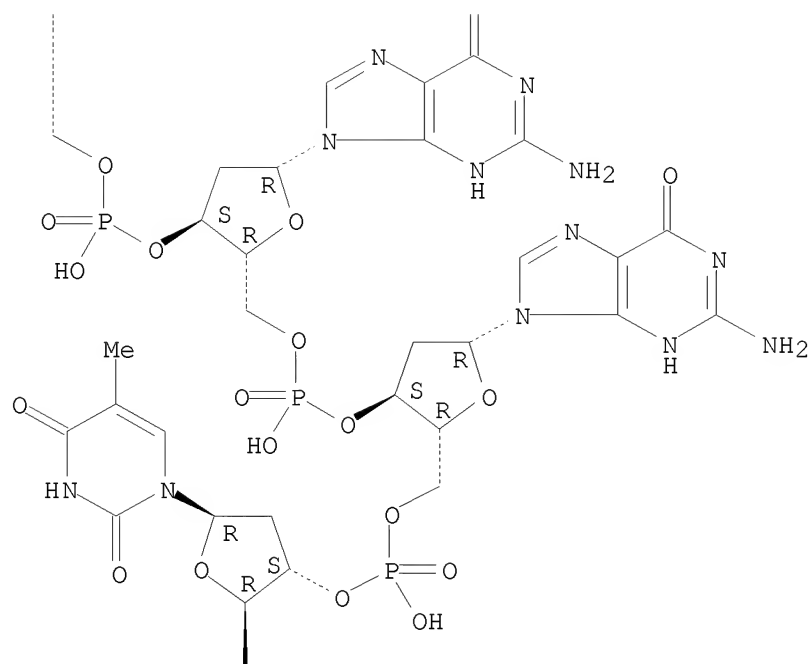
CRN 1007858-30-1
 CMF C100 H124 N30 O55 P8

Absolute stereochemistry.
 Double bond geometry as shown.

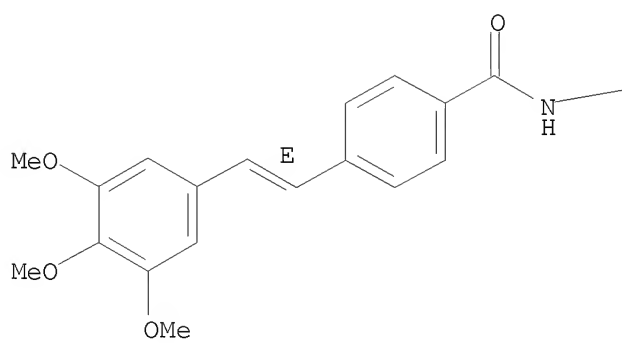




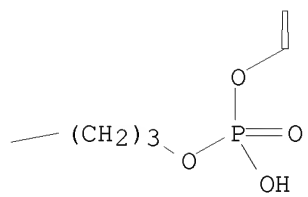
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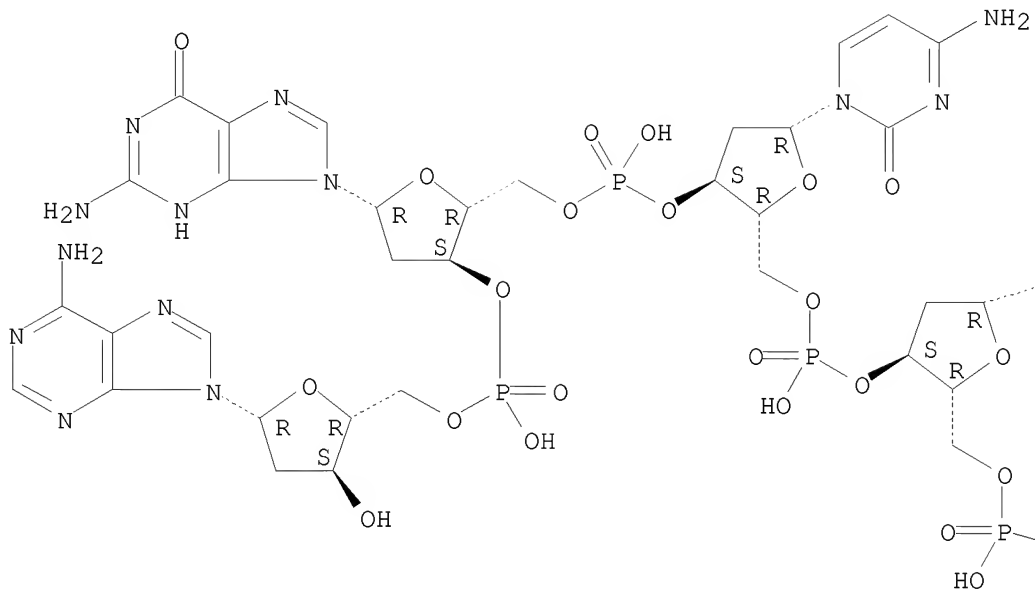
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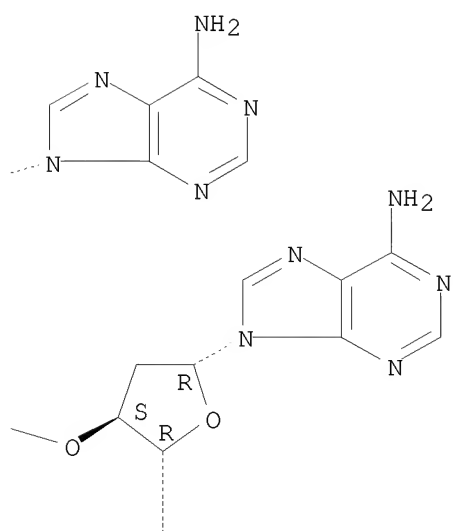
CMF C78 H98 N33 O44 P7

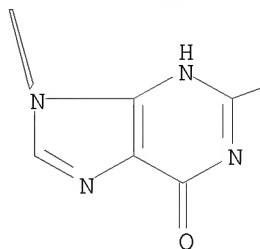
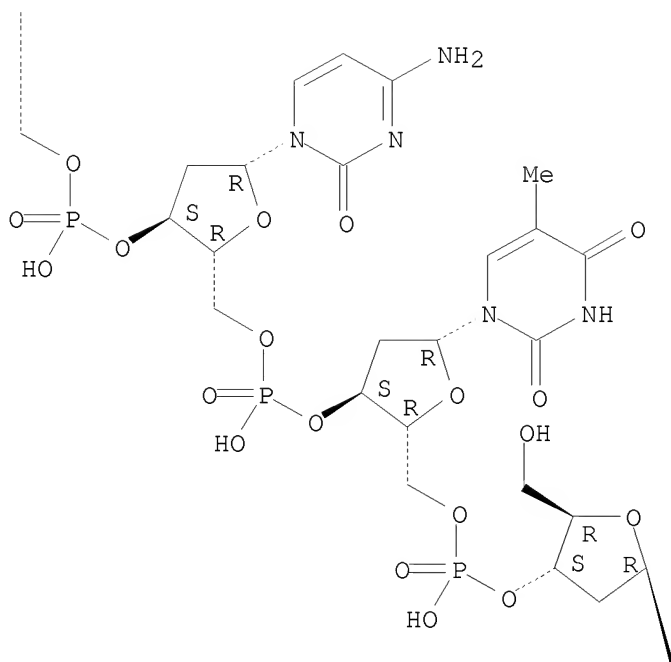
Absolute stereochemistry.

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—NH₂

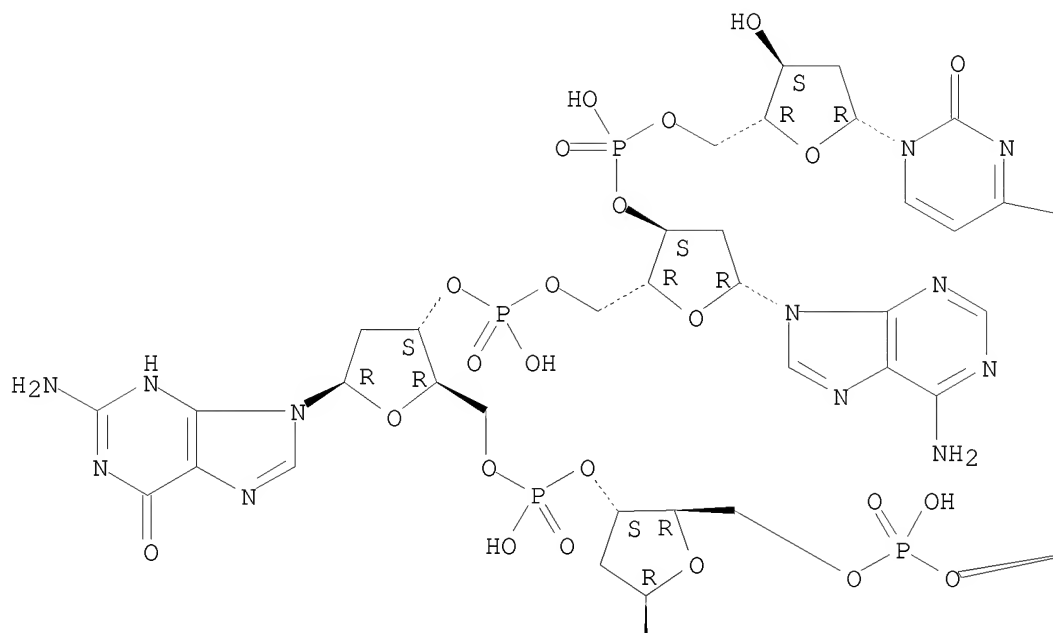
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 CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxy-, complex with
 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)

CM 1

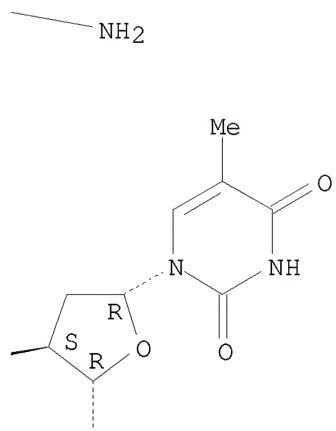
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CMF C100 H124 N30 O55 P8

Absolute stereochemistry.
Double bond geometry as shown.

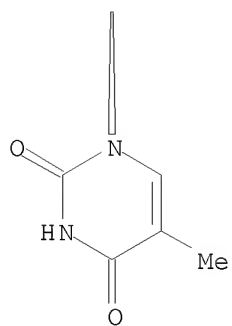
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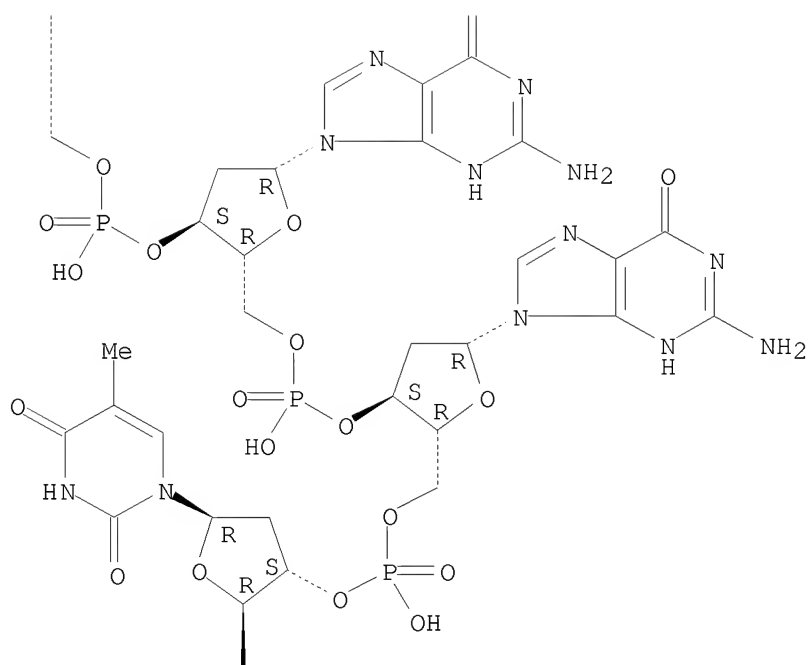
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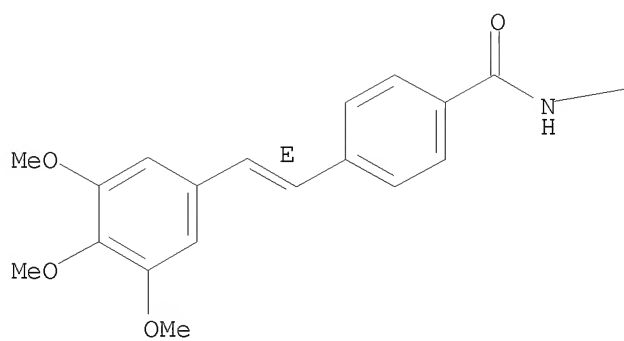
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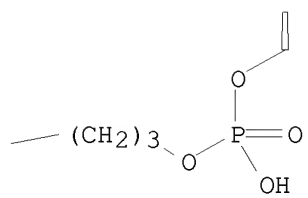


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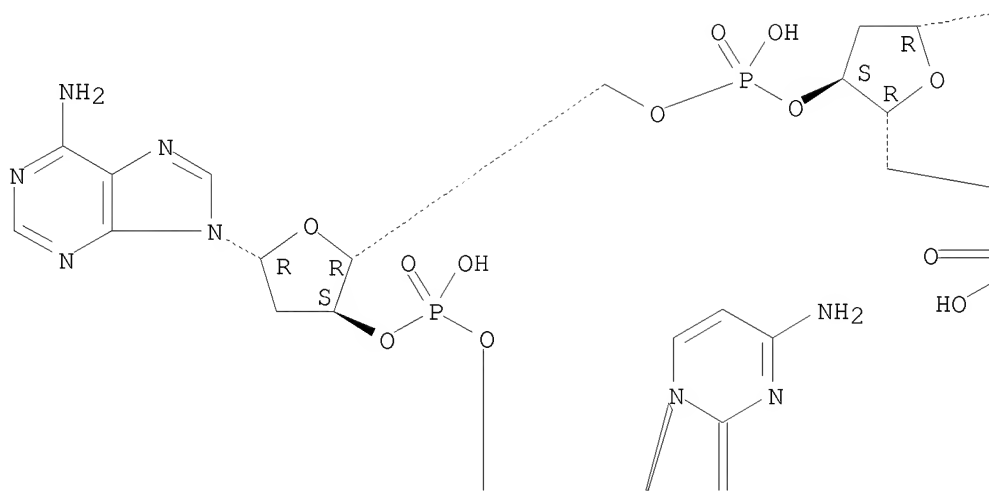


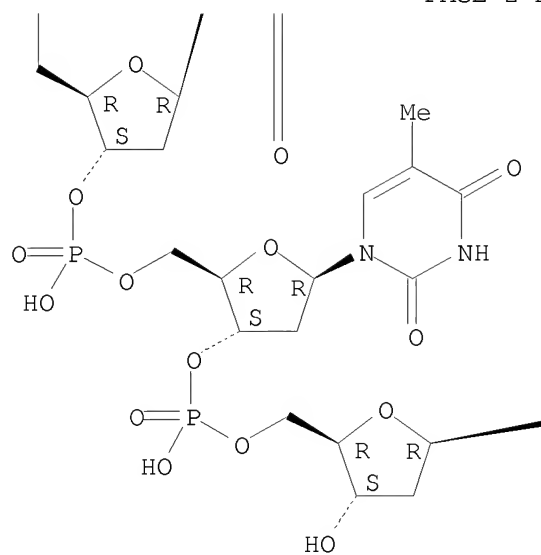
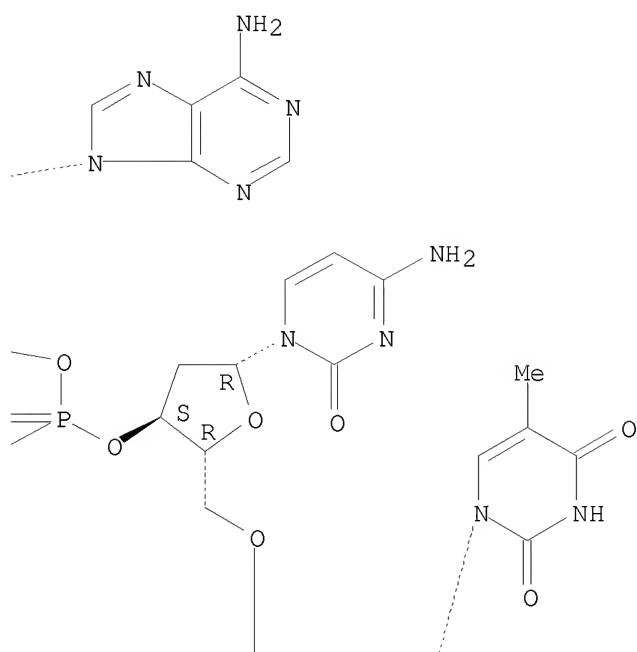
CM 2

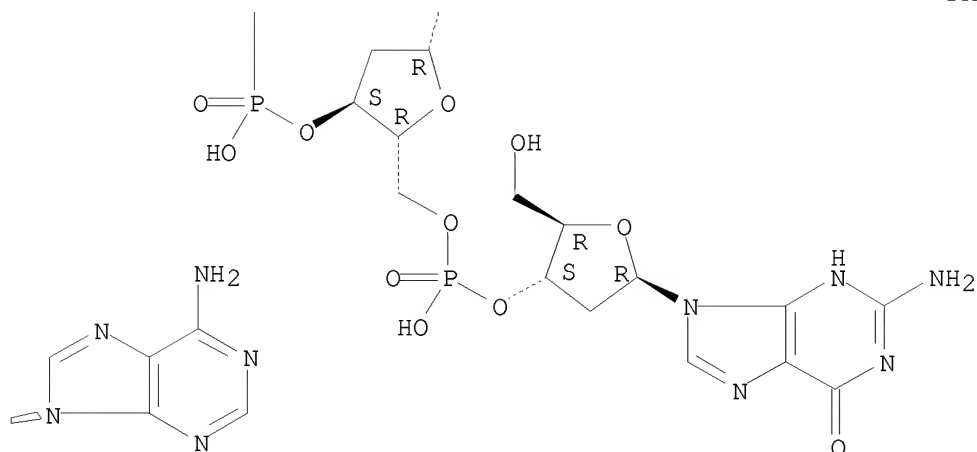
CRN 254745-26-1

CMF C78 H99 N30 O45 P7

Absolute stereochemistry.







RN 1007858-77-6 CAPLUS

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]cytidylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxycytidine (1:1) (CA INDEX NAME)

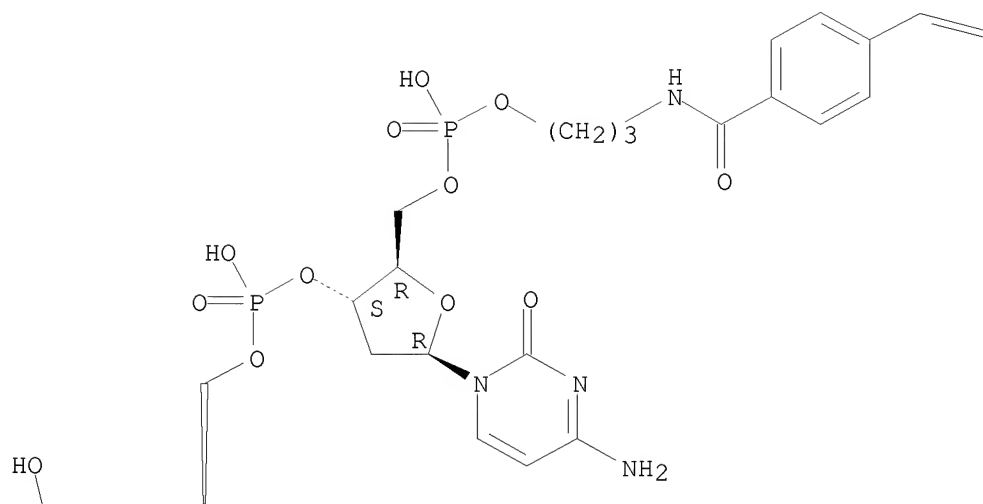
CM 1

CRN 1007858-76-5

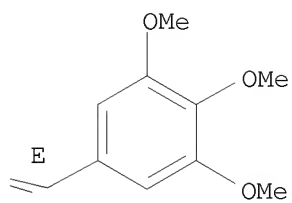
CMF C99 H123 N31 O54 P8

Absolute stereochemistry.
Double bond geometry as shown.

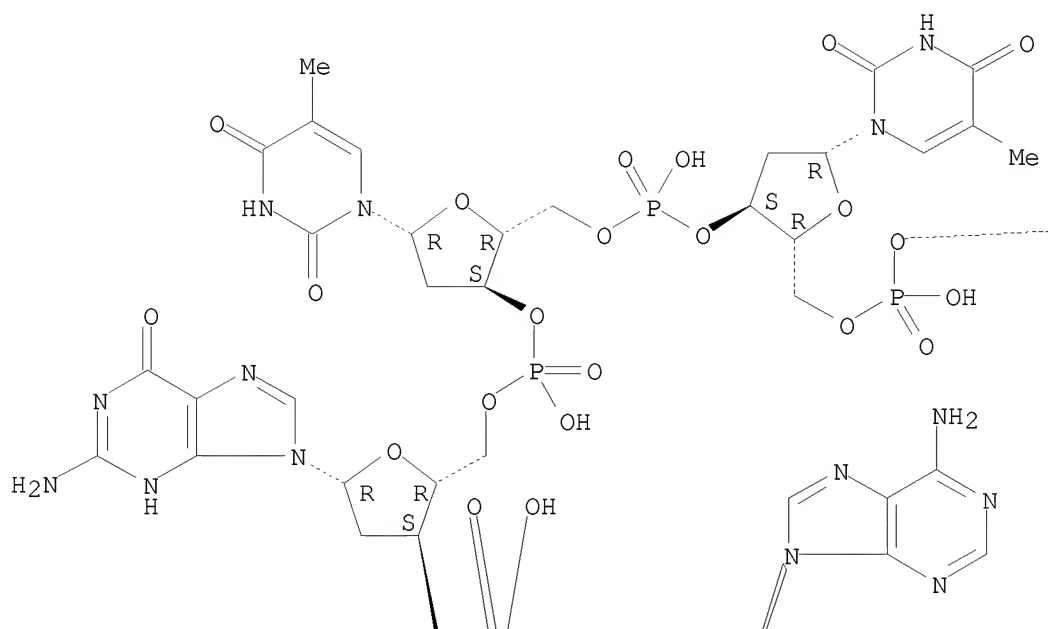
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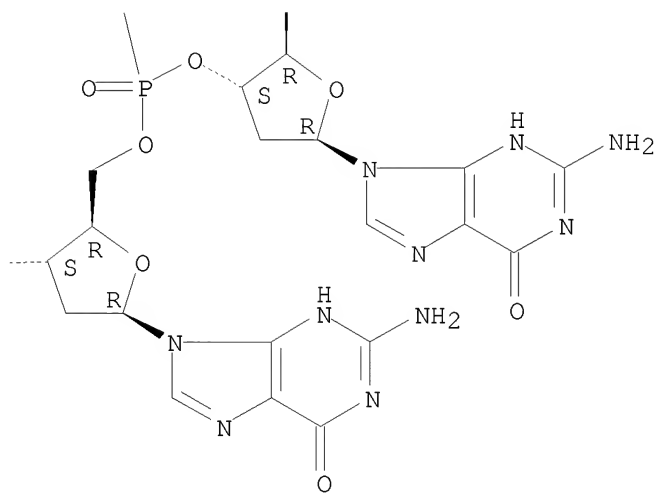
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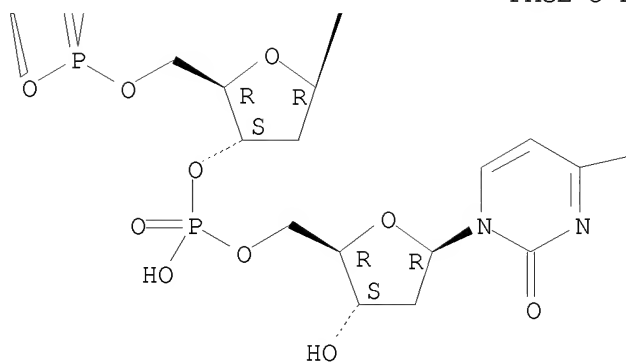
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NH₂

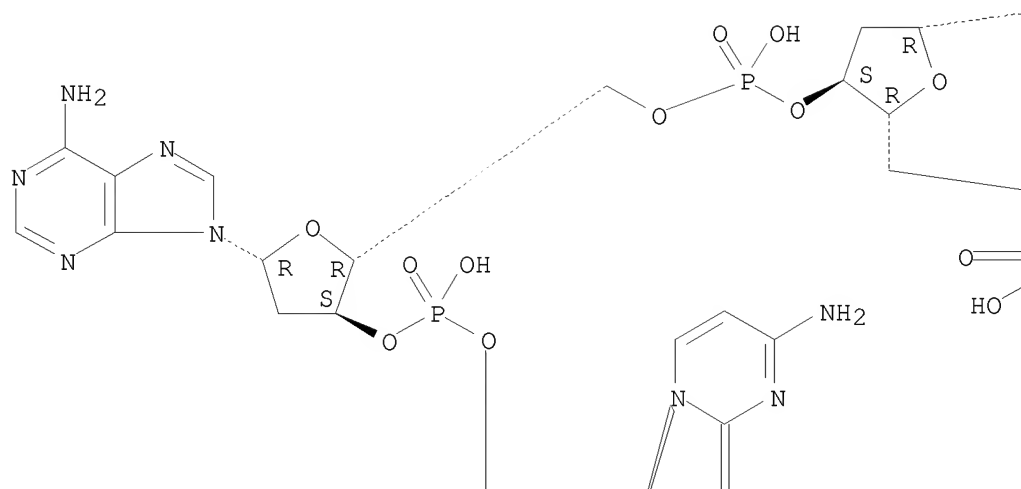
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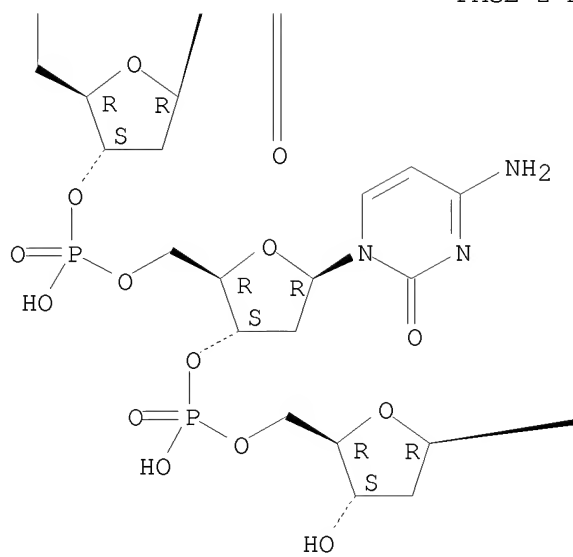
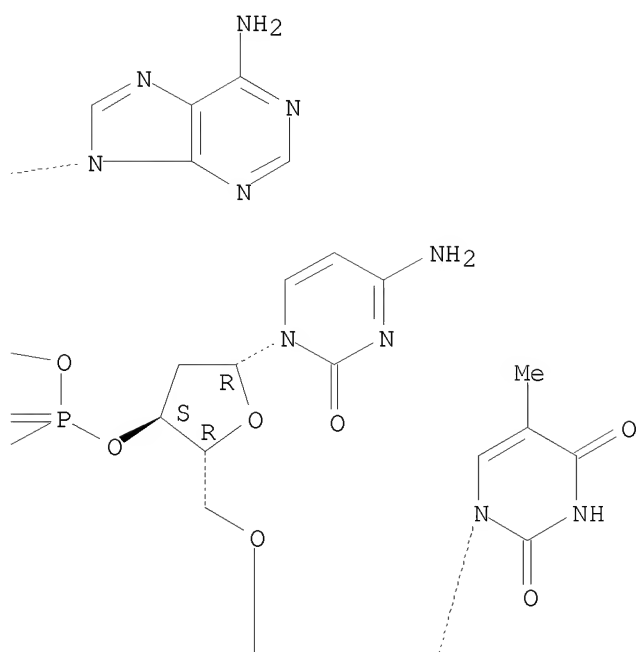
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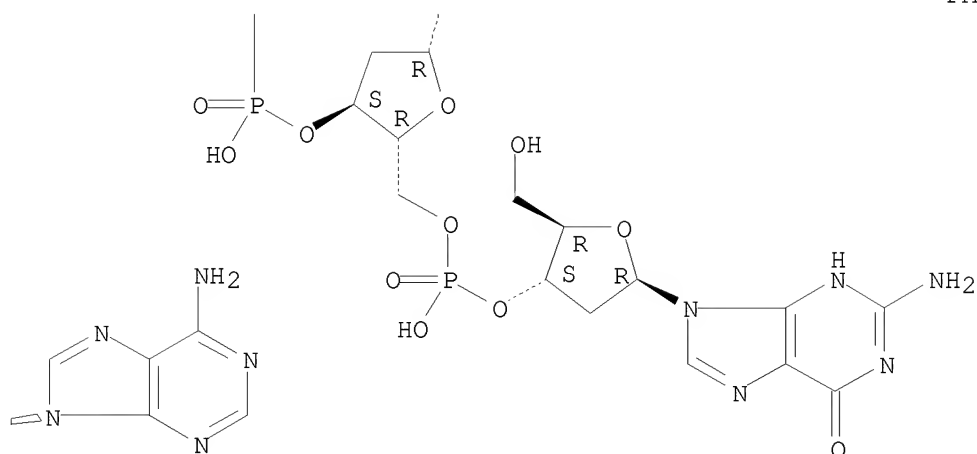
CMF C77 H98 N31 O44 P7

Absolute stereochemistry.

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RN 1007858-85-6 CAPLUS

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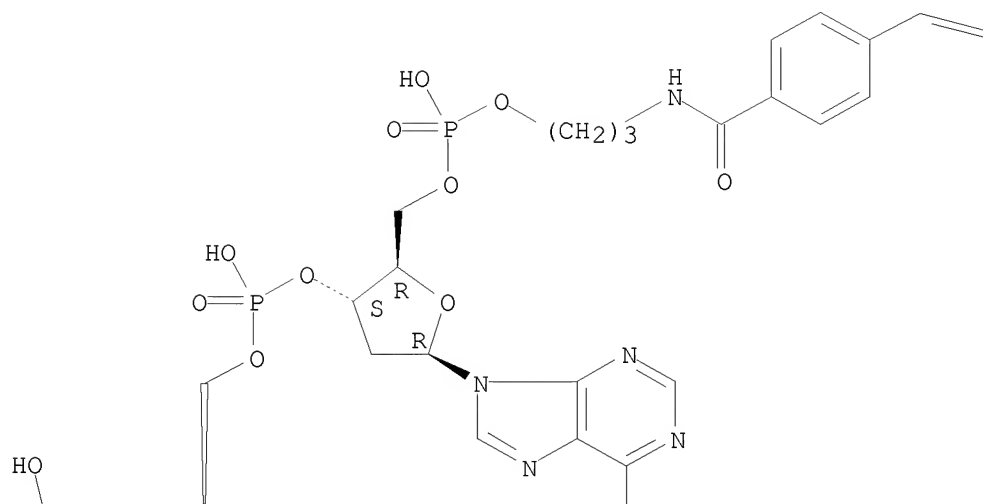
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CRN 1007858-84-5

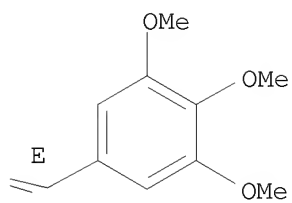
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Absolute stereochemistry.
Double bond geometry as shown.

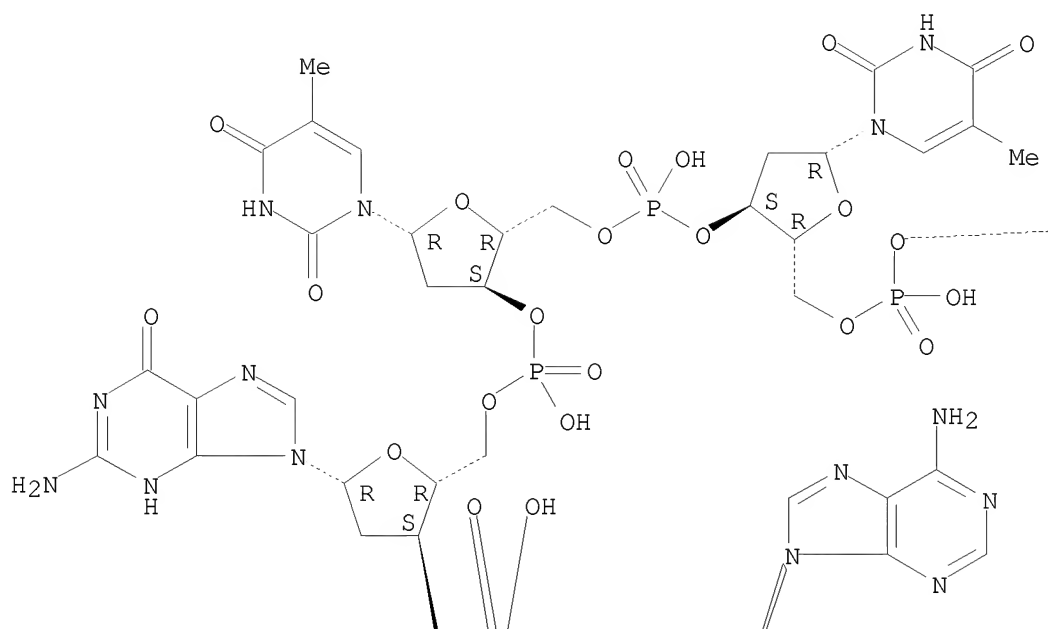
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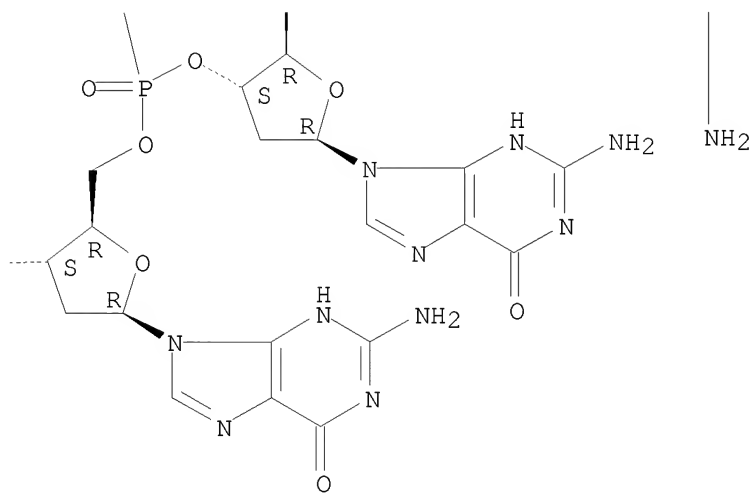
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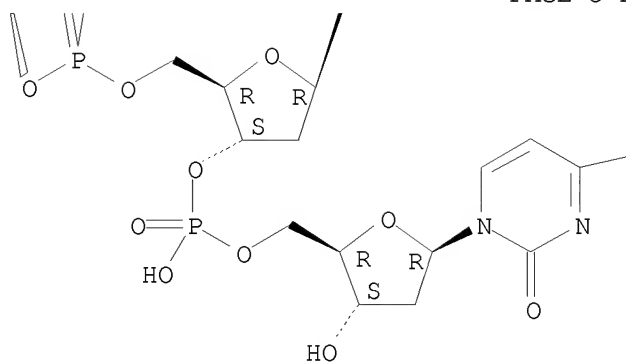
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NH₂

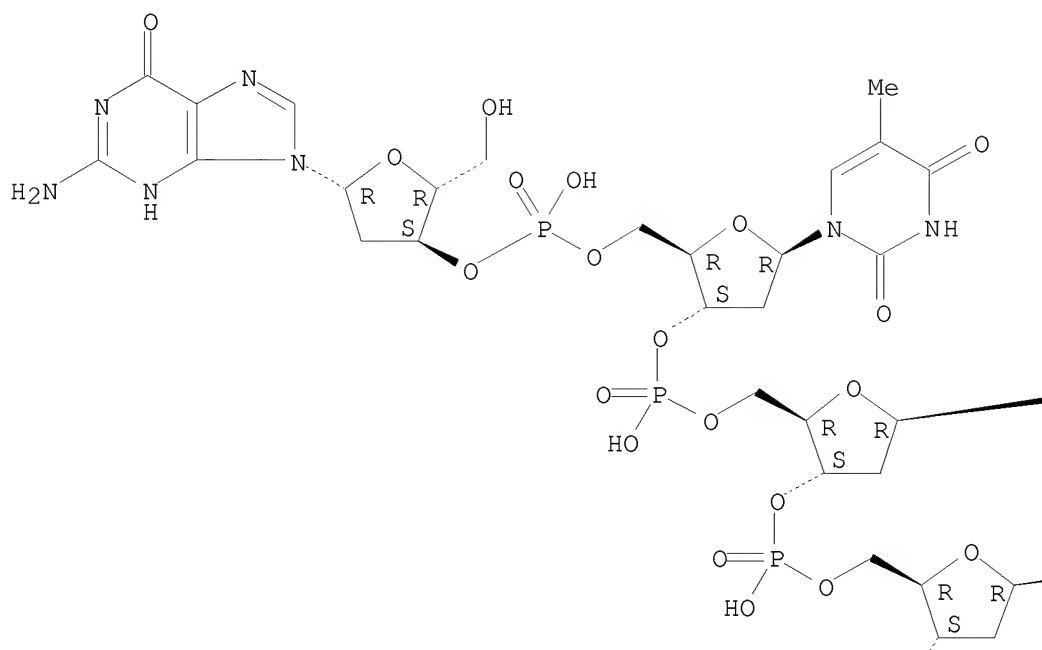
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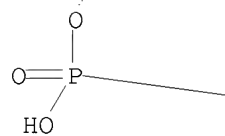
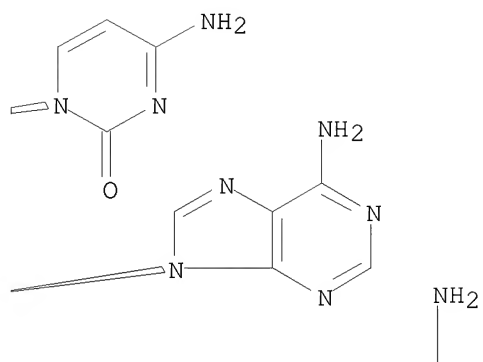
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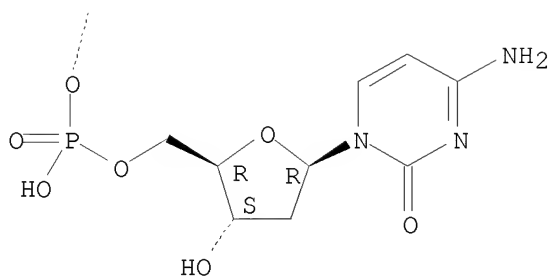
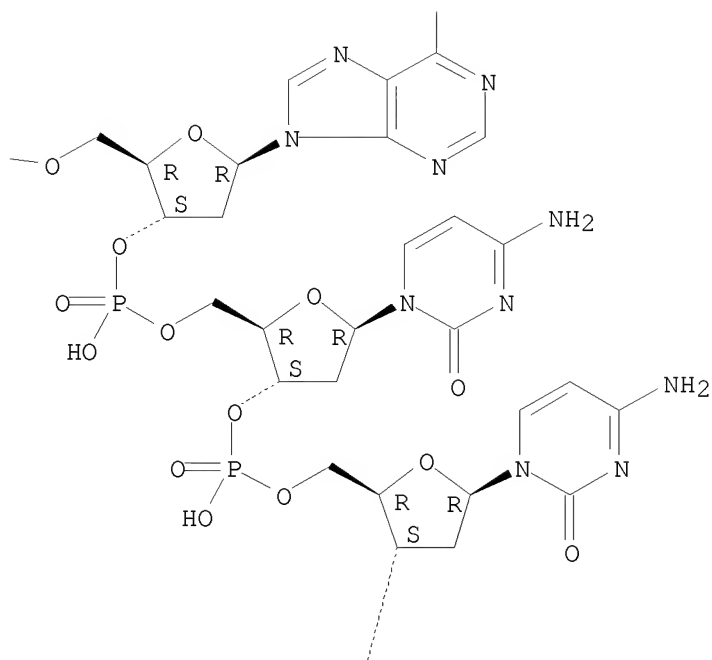
CMF C76 H98 N29 O45 P7

Absolute stereochemistry.

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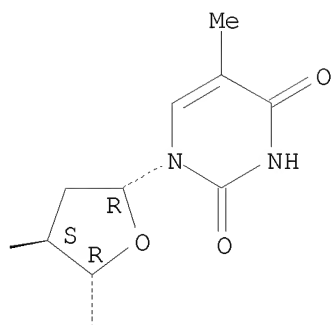
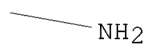
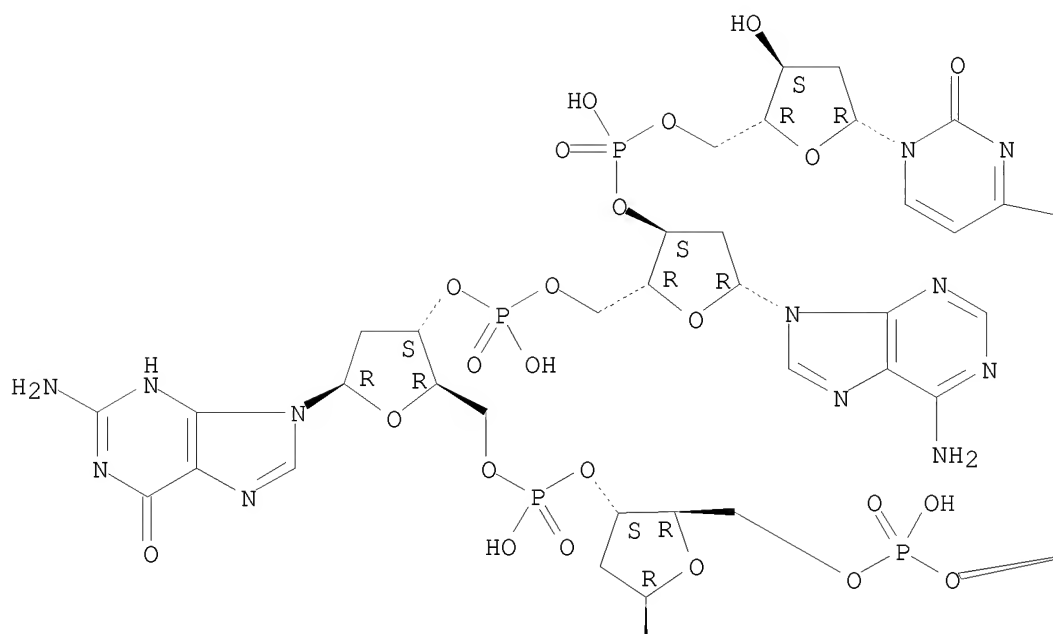




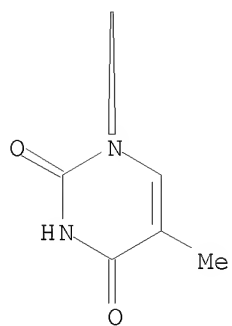


RN 1007858-95-8 CAPLUS
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 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)
 CM 1
 CRN 1007858-30-1
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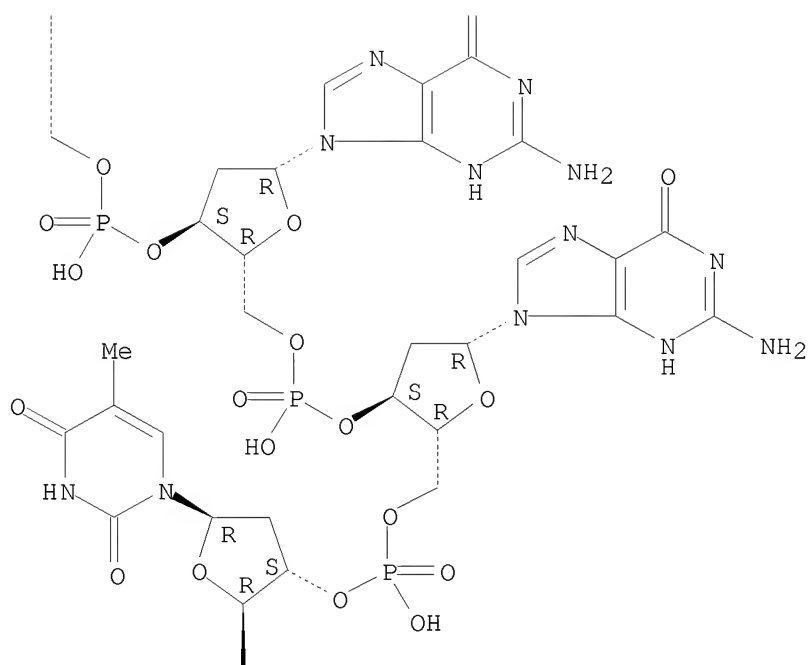
Absolute stereochemistry.
 Double bond geometry as shown.



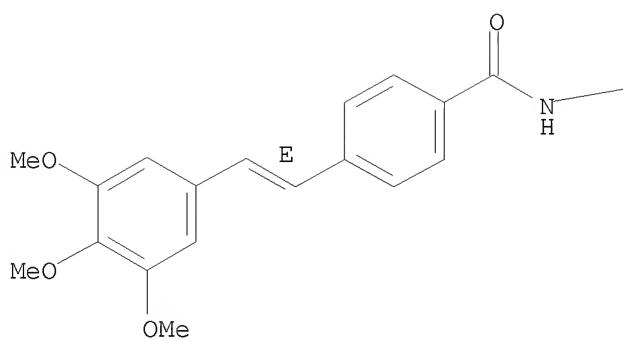
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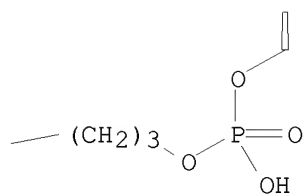


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PAGE 3-A



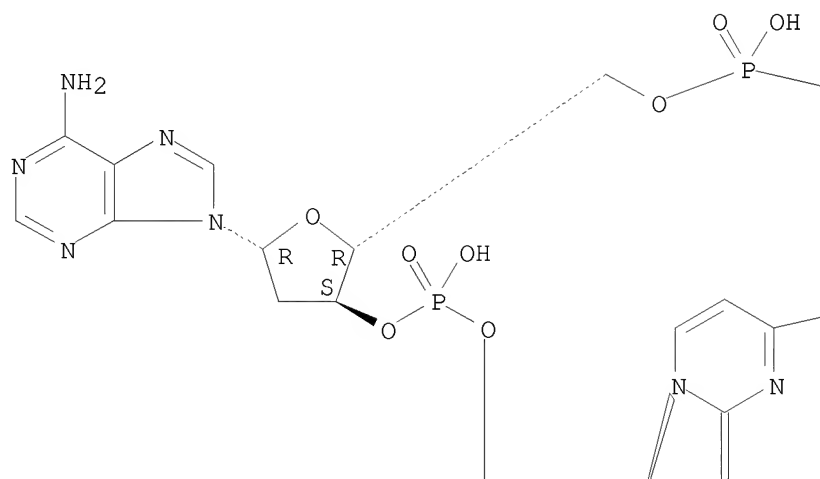


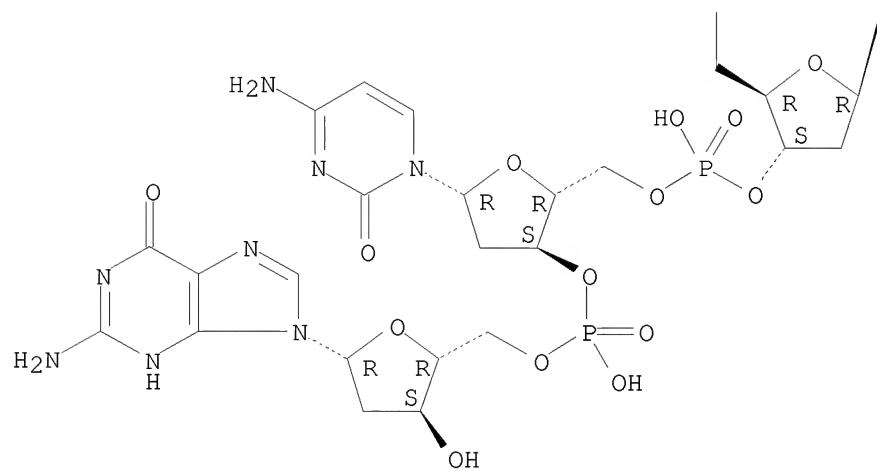
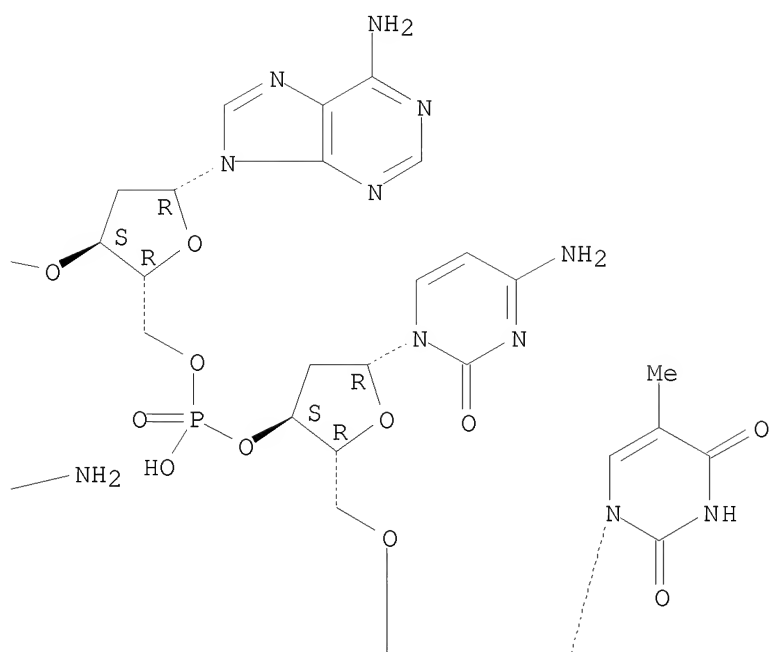
CM 2

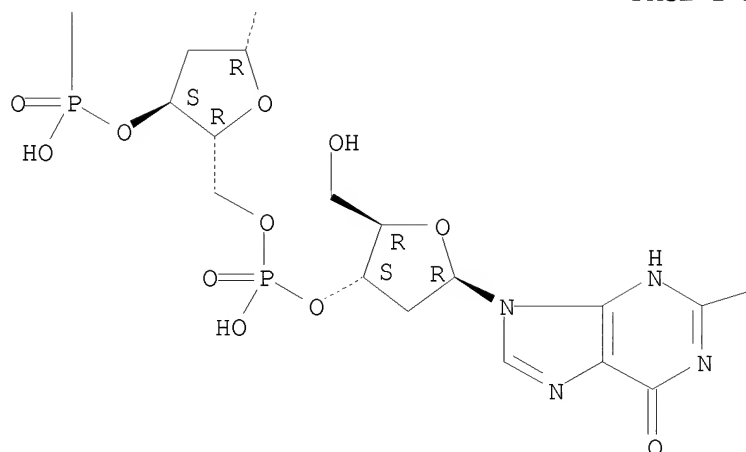
CRN 254745-04-5

CMF C77 H98 N31 O45 P7

Absolute stereochemistry.







—NH₂

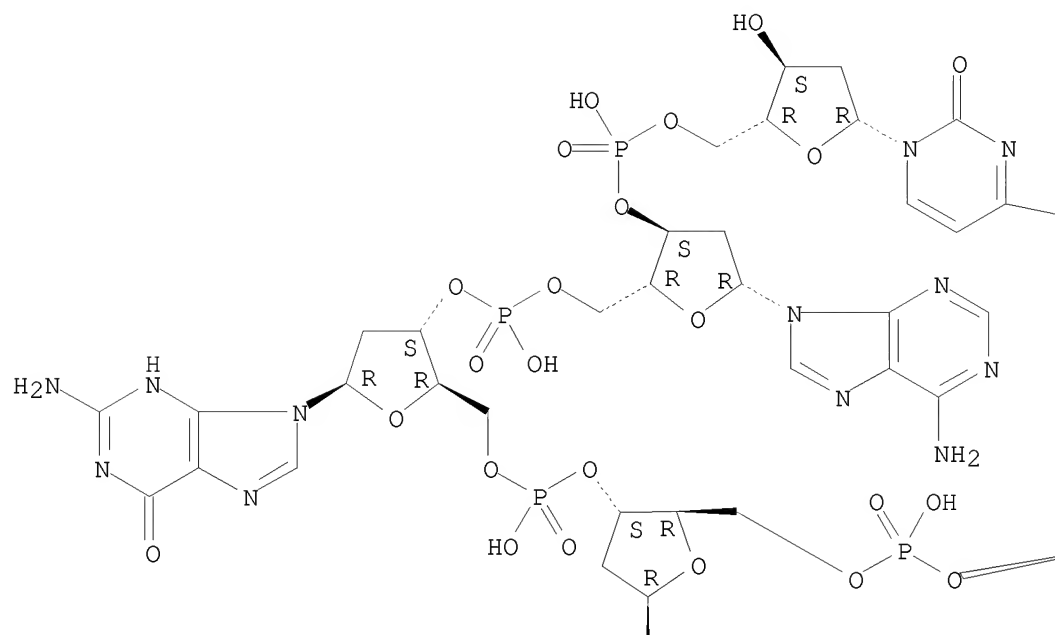
RN 1007860-63-0 CAPLUS
 CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)

CM 1

CRN 1007858-30-1
 CMF C100 H124 N30 O55 P8

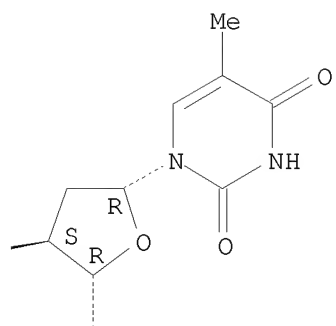
Absolute stereochemistry.
 Double bond geometry as shown.

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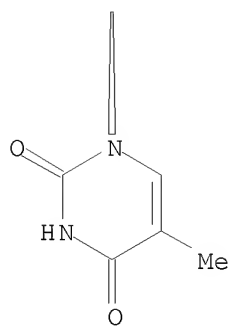
PAGE 1-B

NH₂

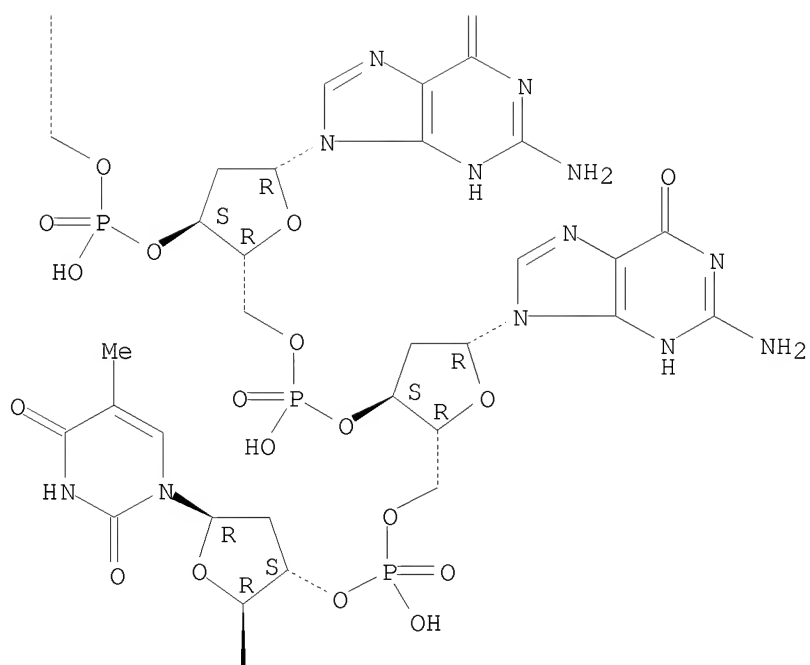


O

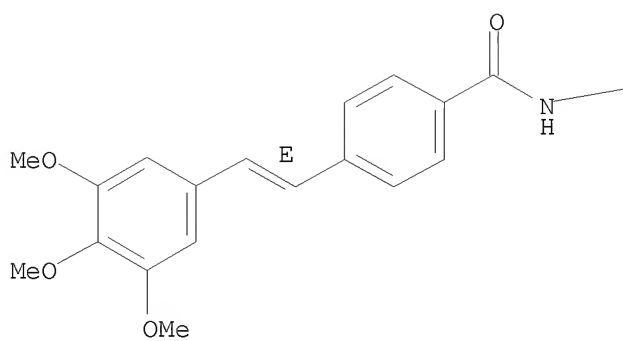
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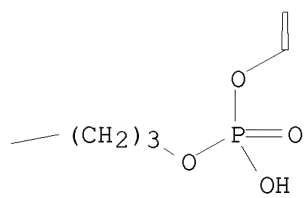


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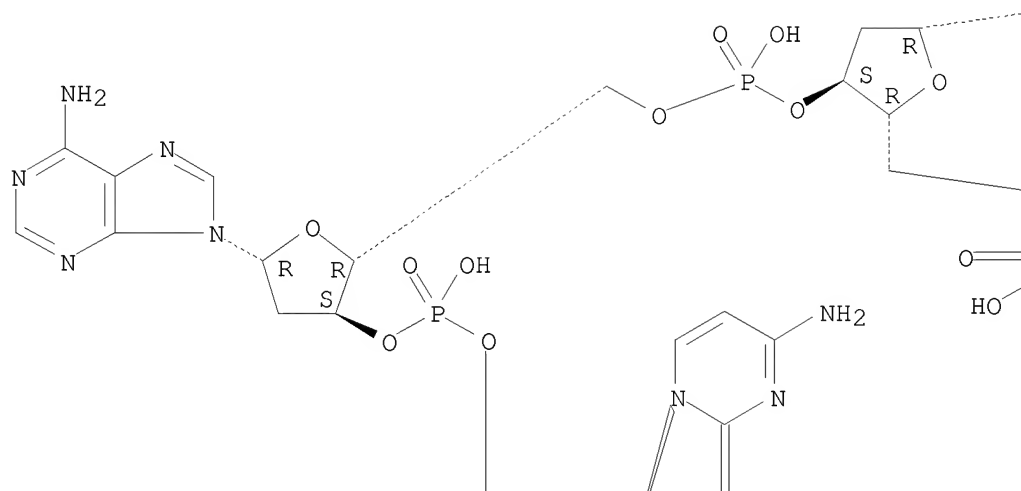


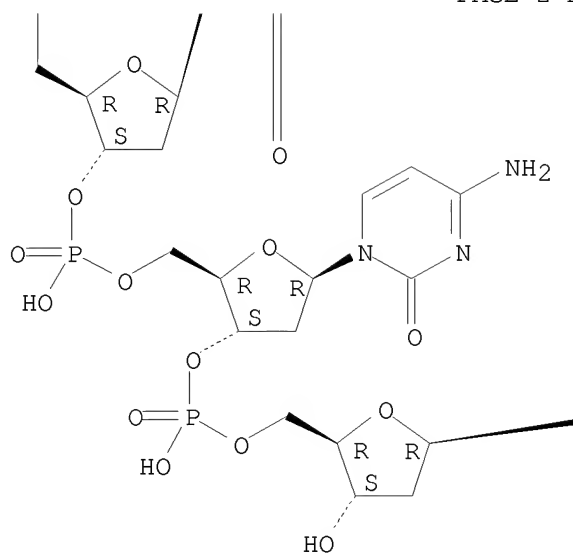
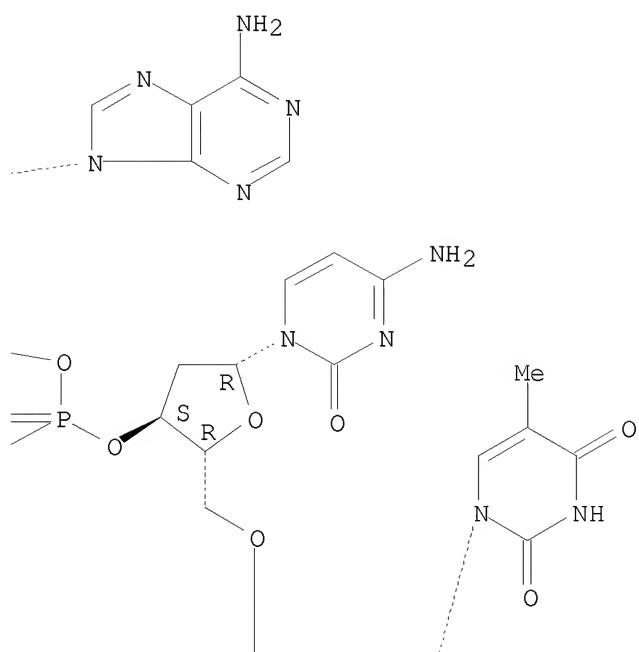
CM 2

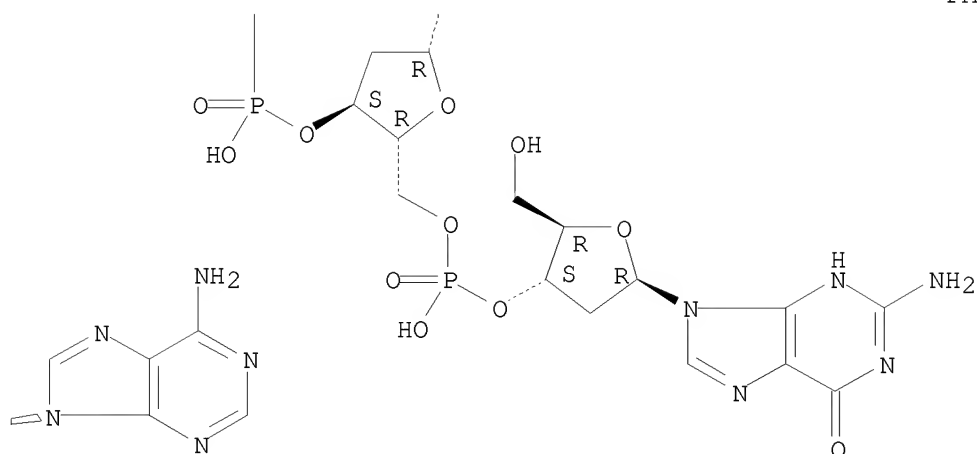
CRN 252236-06-9

CMF C77 H98 N31 O44 P7

Absolute stereochemistry.







RN 1007860-74-3 CAPLUS

CN Guanosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]cytidylyl-
(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxycytidine (1:1) (CA INDEX NAME)

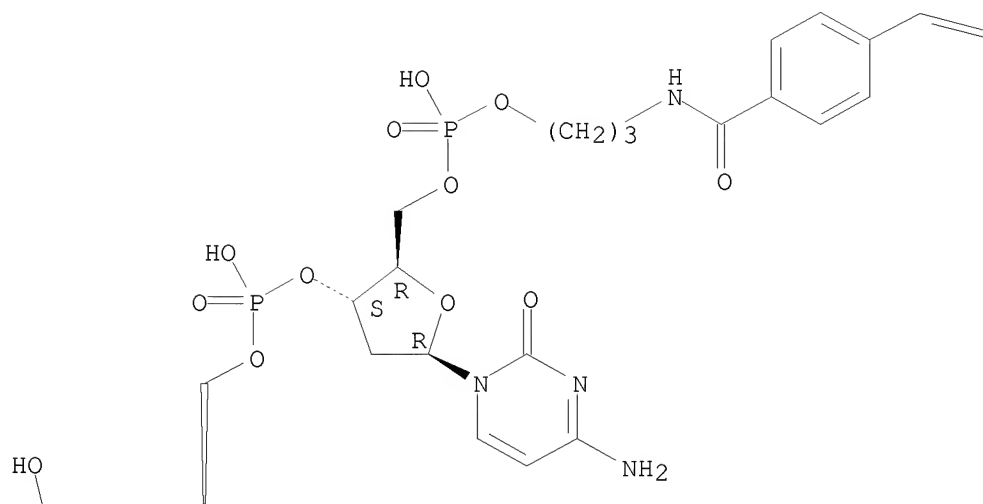
CM 1

CRN 1007858-76-5

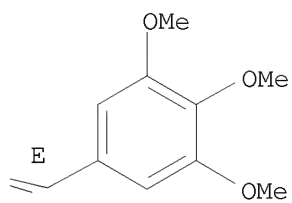
CMF C99 H123 N31 O54 P8

Absolute stereochemistry.
Double bond geometry as shown.

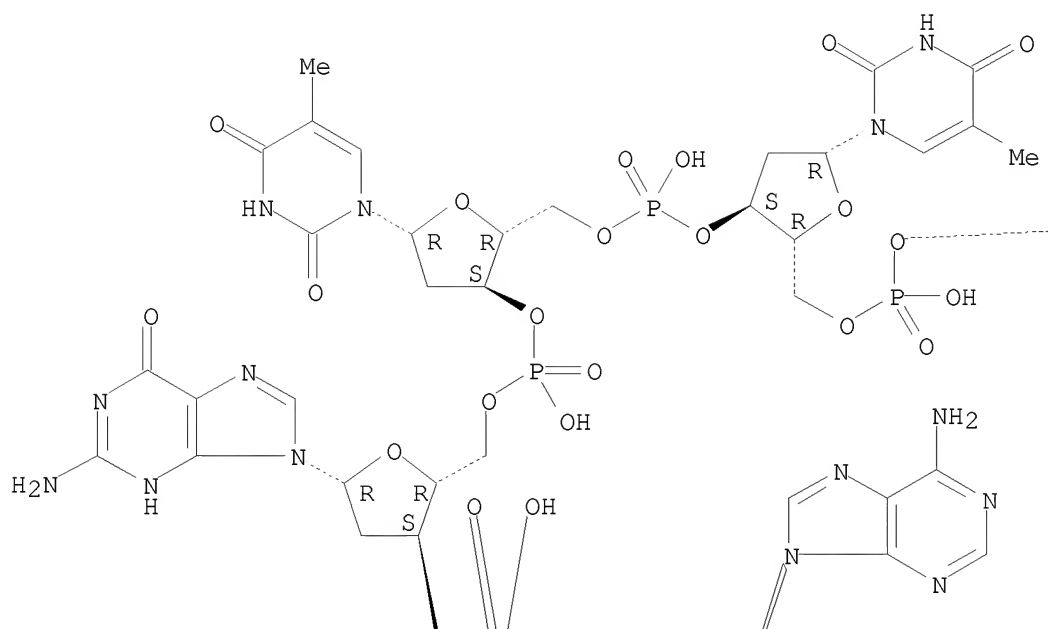
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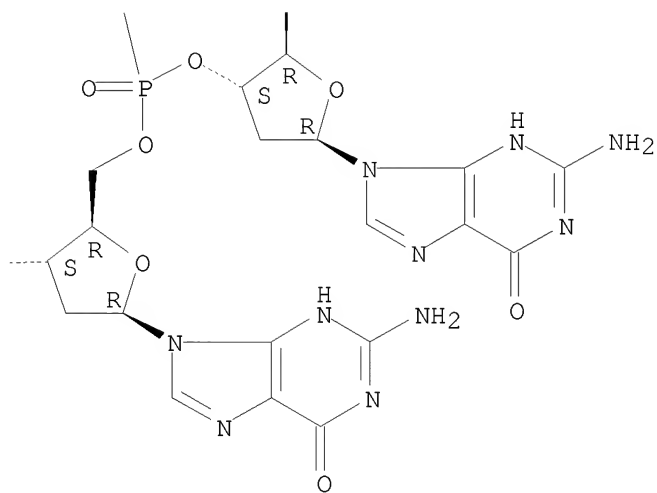
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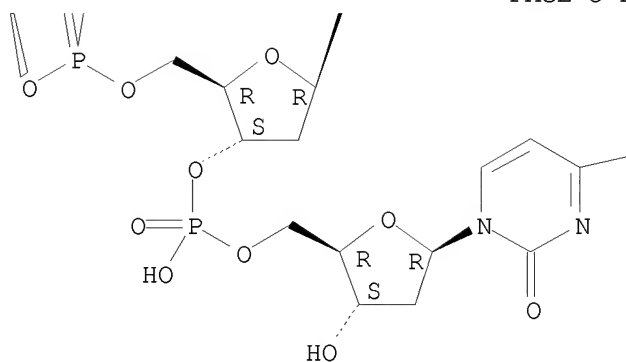
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NH₂

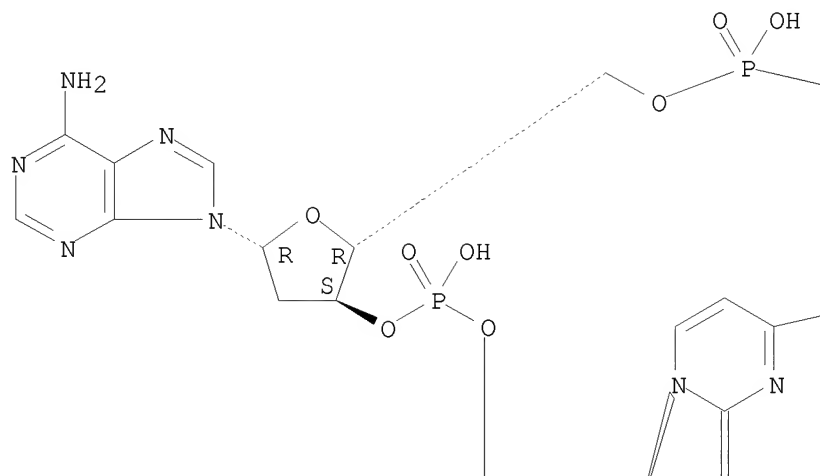
CM 2

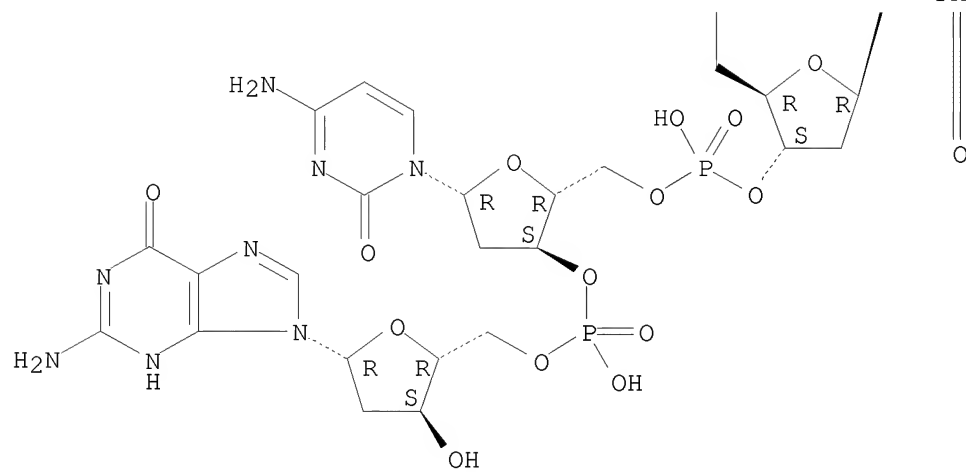
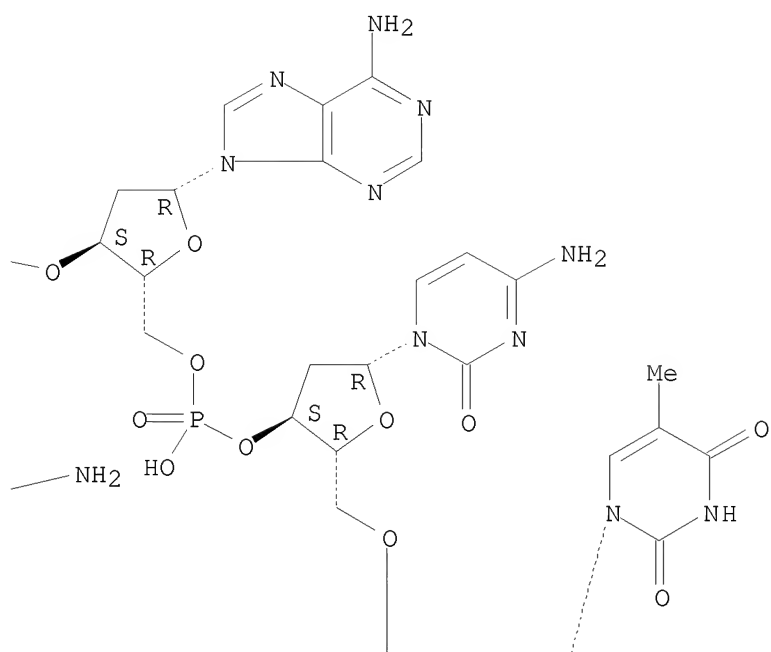
CRN 254745-04-5

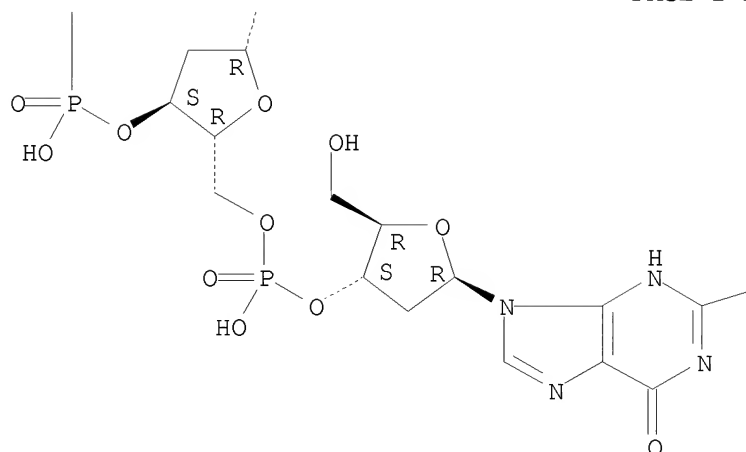
CMF C77 H98 N31 O45 P7

Absolute stereochemistry.

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—NH₂

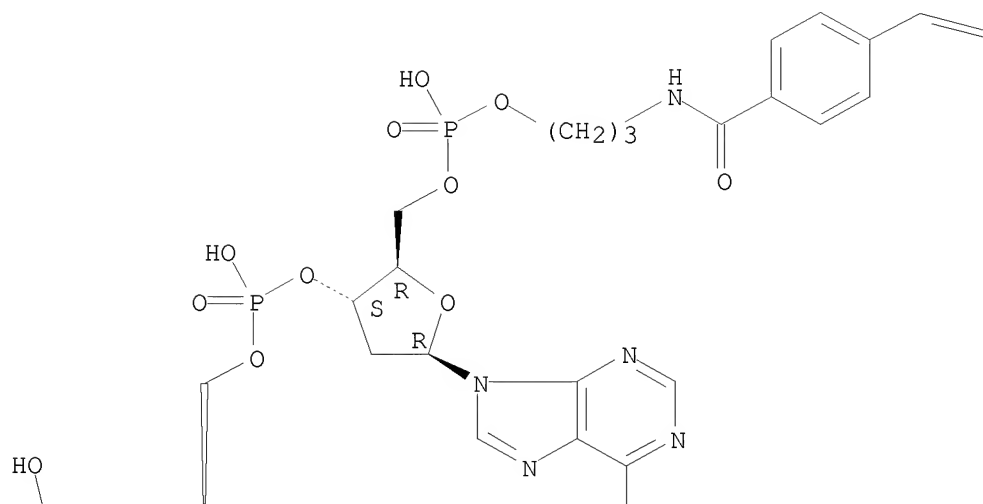
RN 1007860-82-3 CAPLUS
 CN Thymidine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-, complex with
 2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]adenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)

CM 1

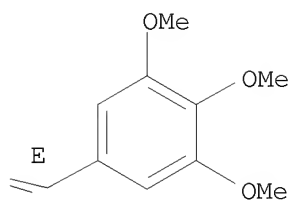
CRN 1007858-84-5
 CMF C100 H123 N33 O53 P8

Absolute stereochemistry.
 Double bond geometry as shown.

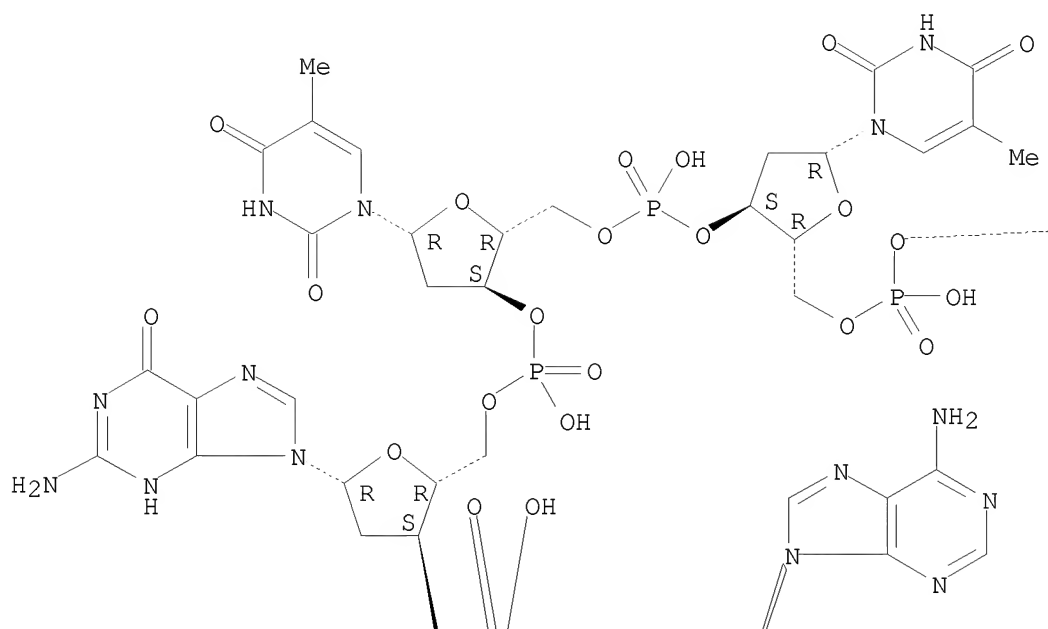
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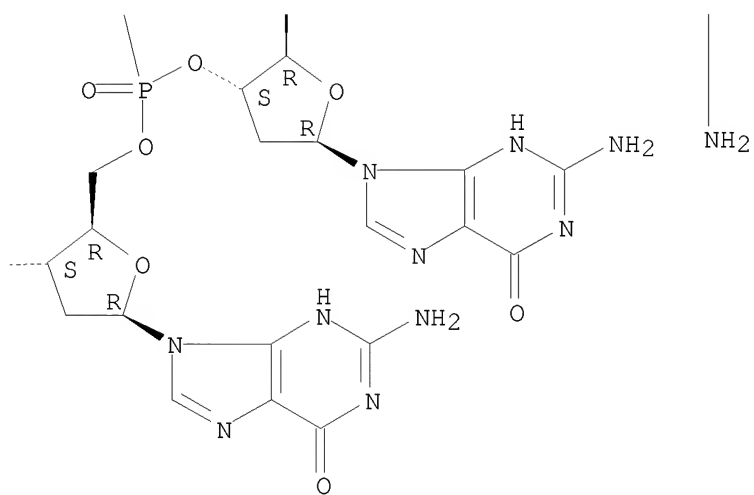
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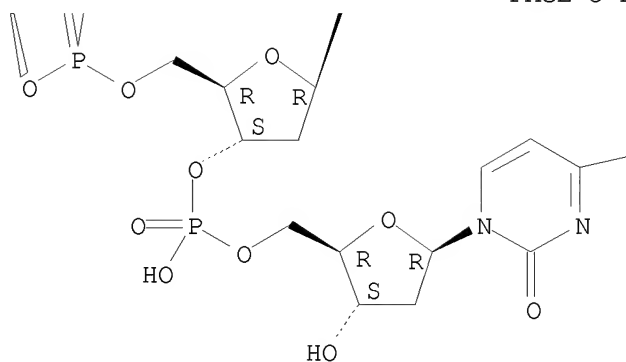
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NH₂

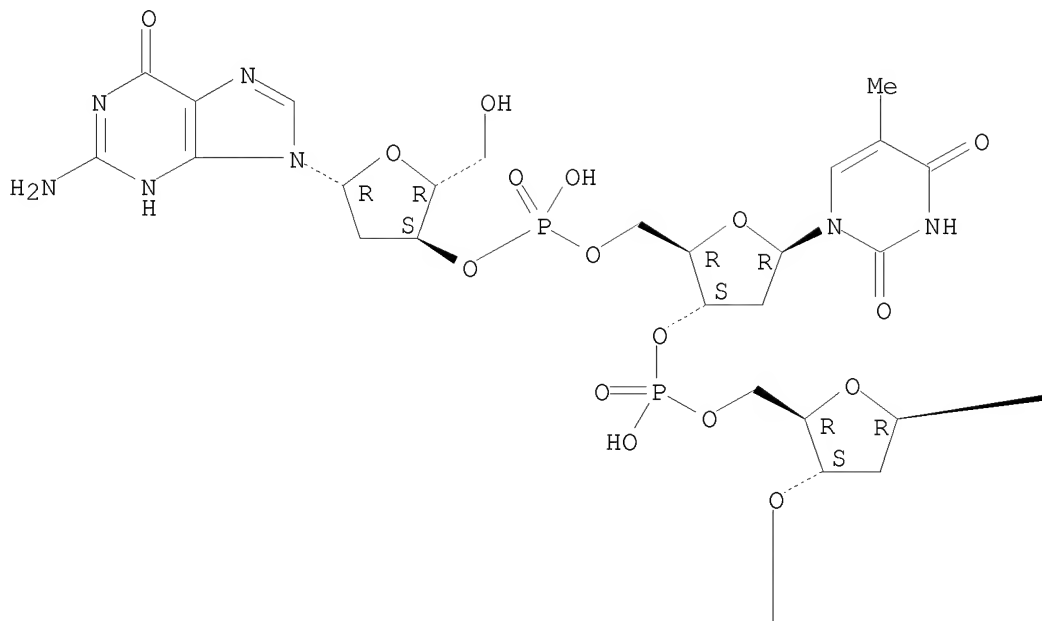
CM 2

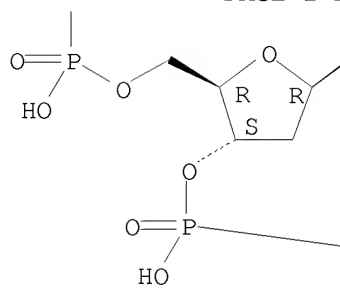
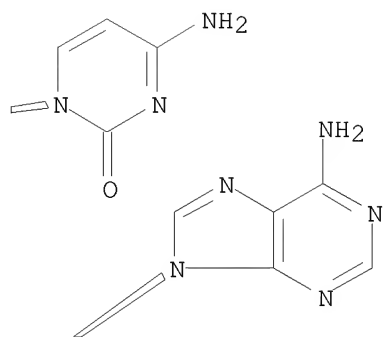
CRN 227078-78-6

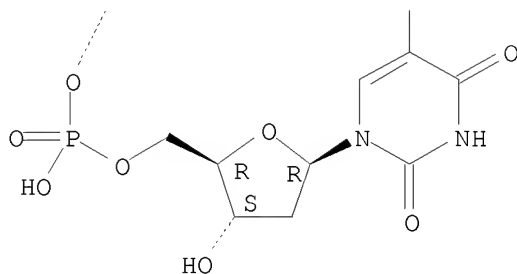
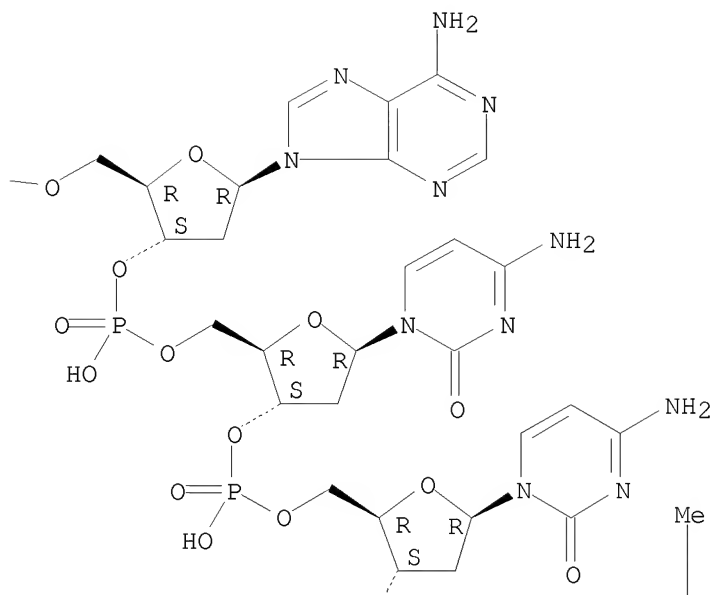
CMF C77 H99 N28 O46 P7

Absolute stereochemistry.

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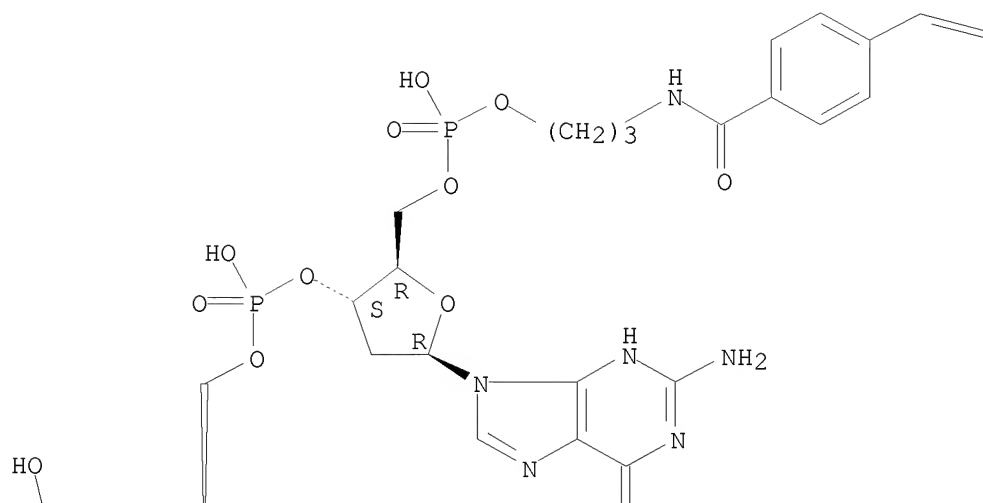




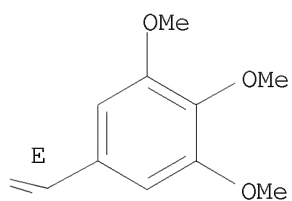
RN 1007860-91-4 CAPLUS
 CN Cytidine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
 2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]guanylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)
 CM 1
 CRN 1007860-45-8
 CMF C100 H123 N33 O54 P8

Absolute stereochemistry.
 Double bond geometry as shown.

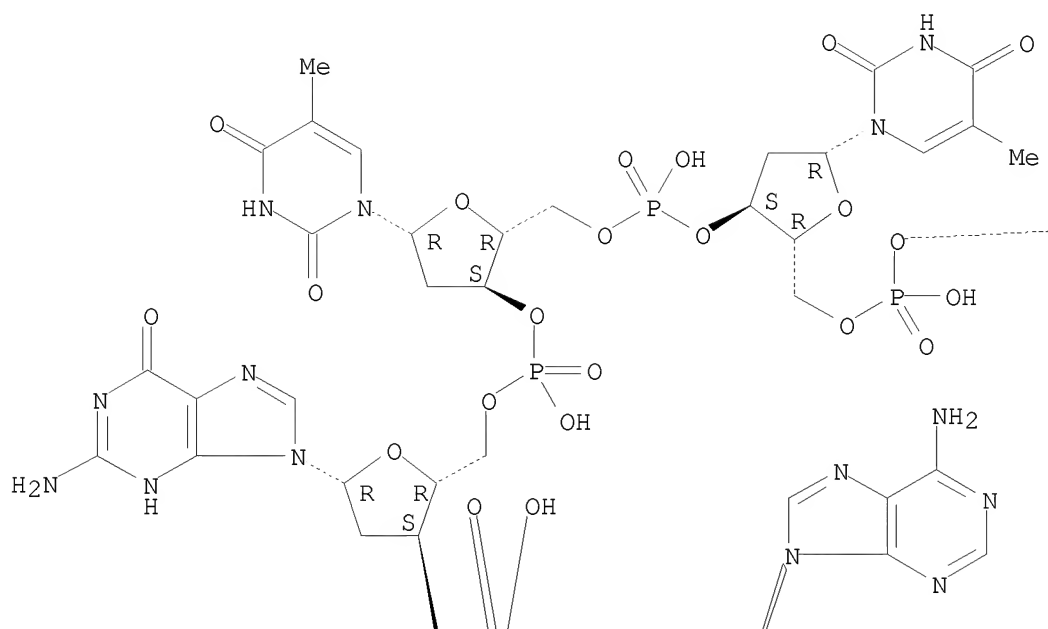
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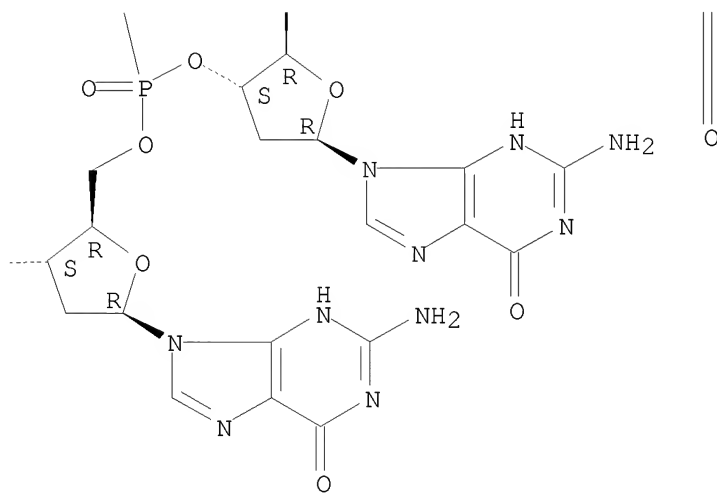
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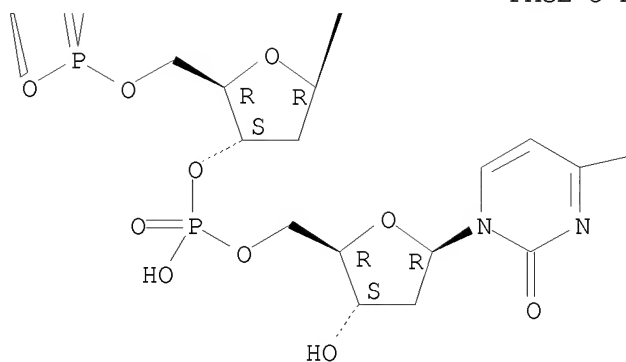
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NH₂

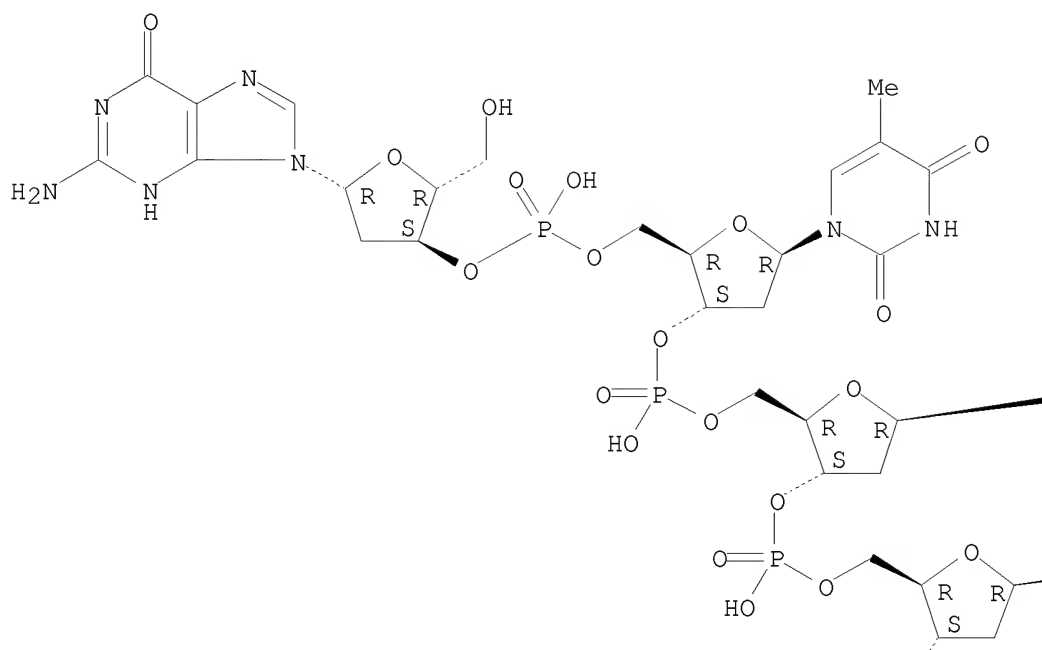
CM 2

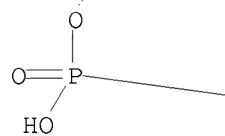
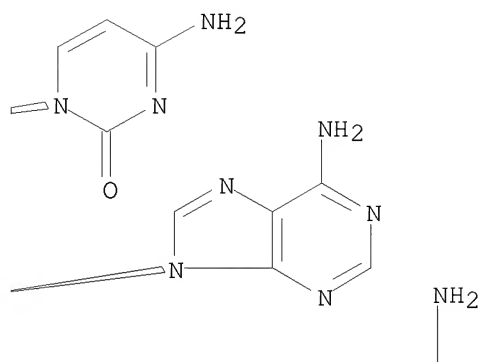
CRN 254745-10-3

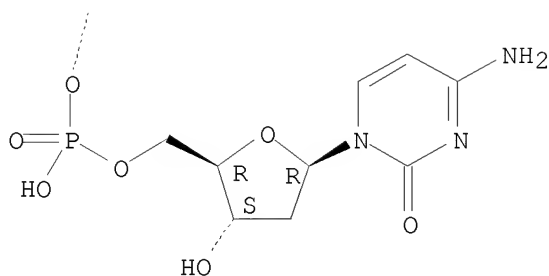
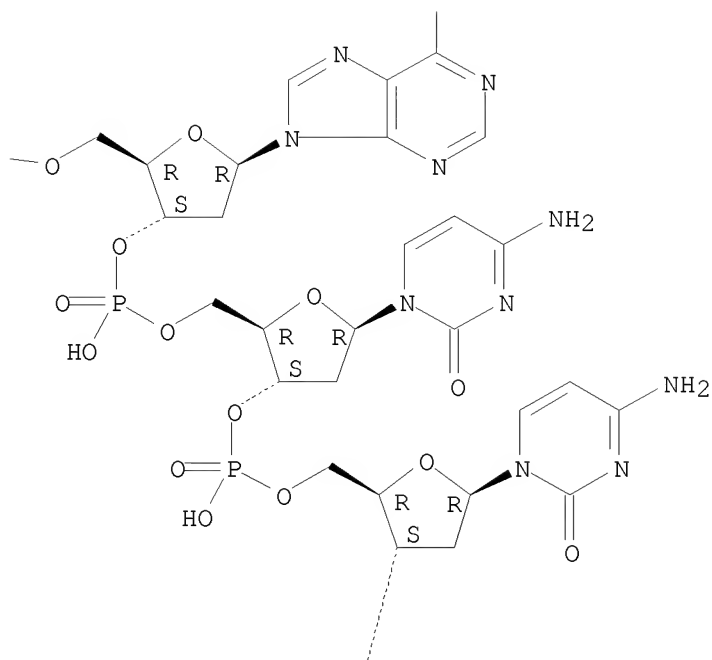
CMF C76 H98 N29 O45 P7

Absolute stereochemistry.

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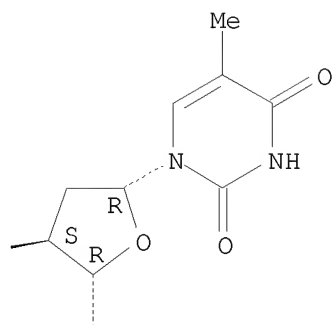
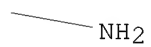
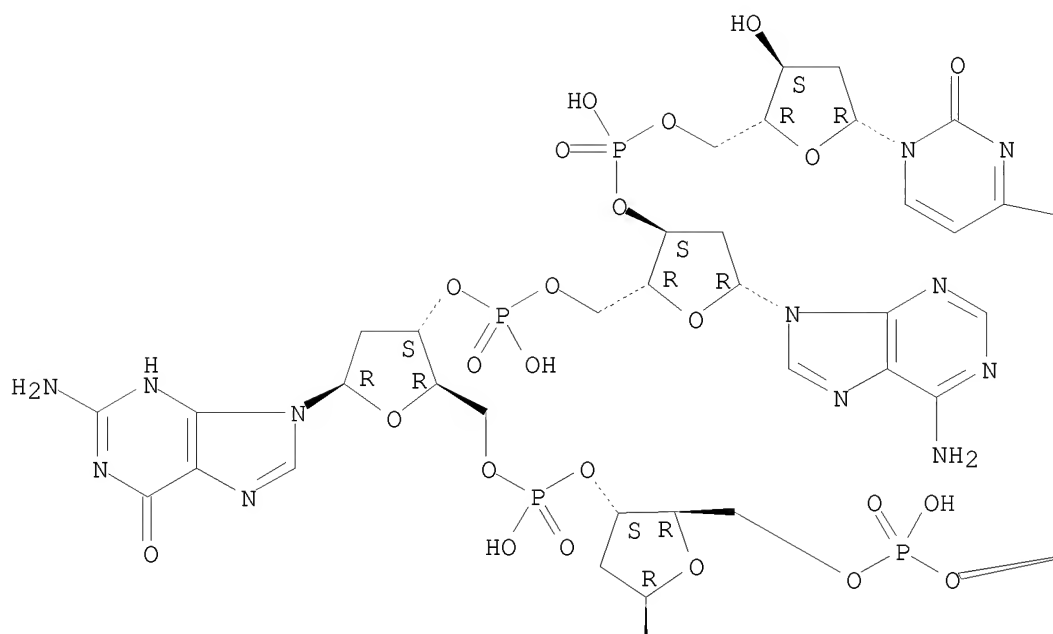




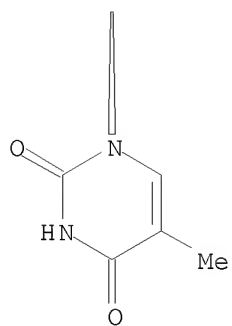


RN 1007860-96-9 CAPLUS
 CN Cytidine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)
 CM 1
 CRN 1007858-30-1
 CMF C100 H124 N30 O55 P8

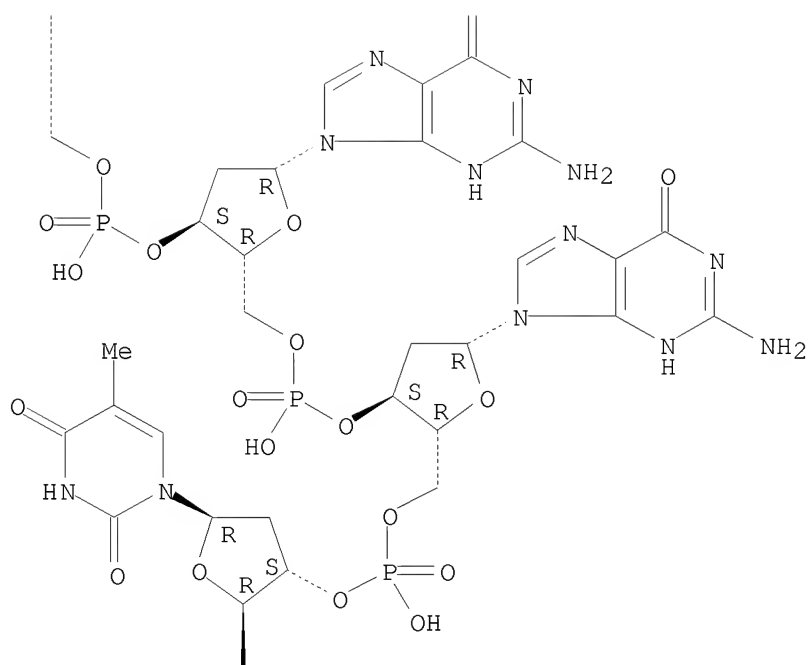
Absolute stereochemistry.
 Double bond geometry as shown.



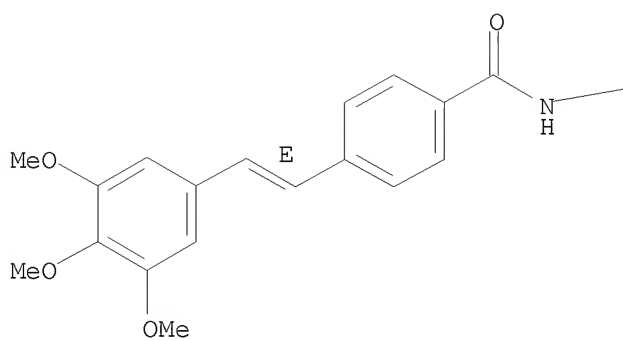
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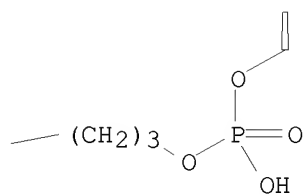


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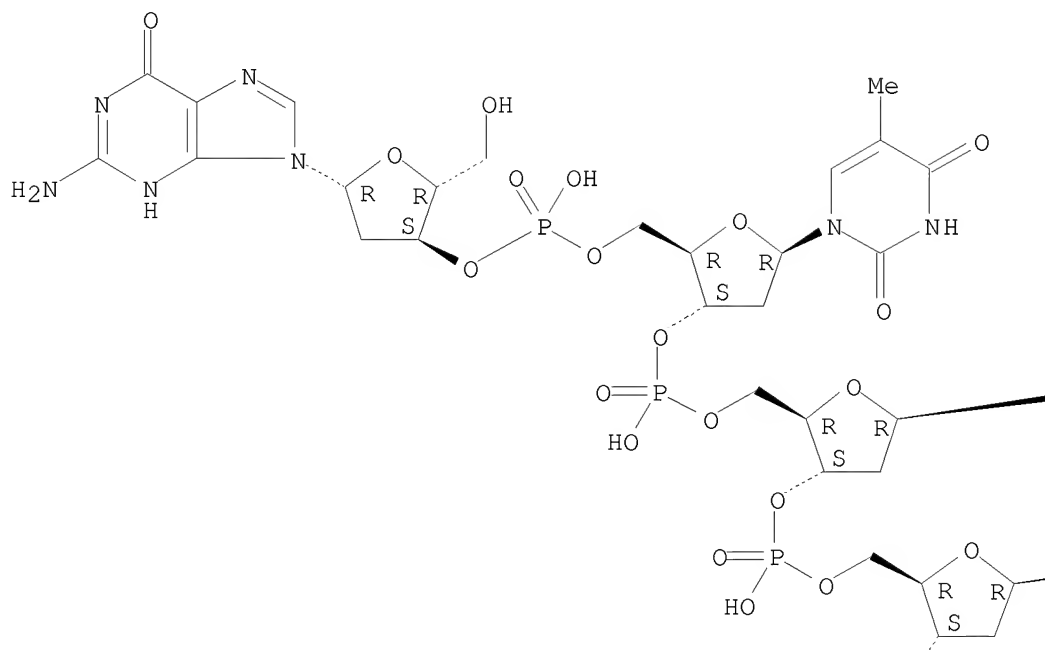


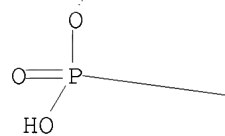
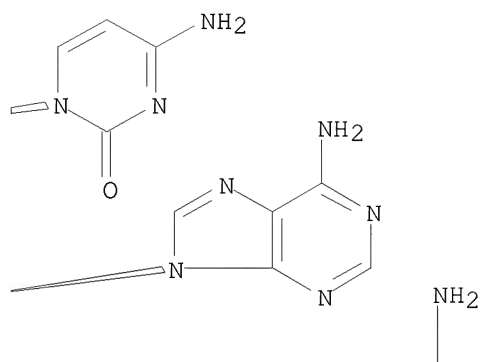
CM 2

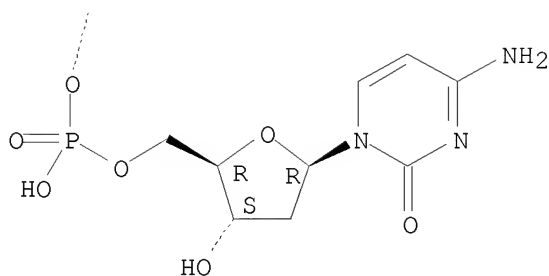
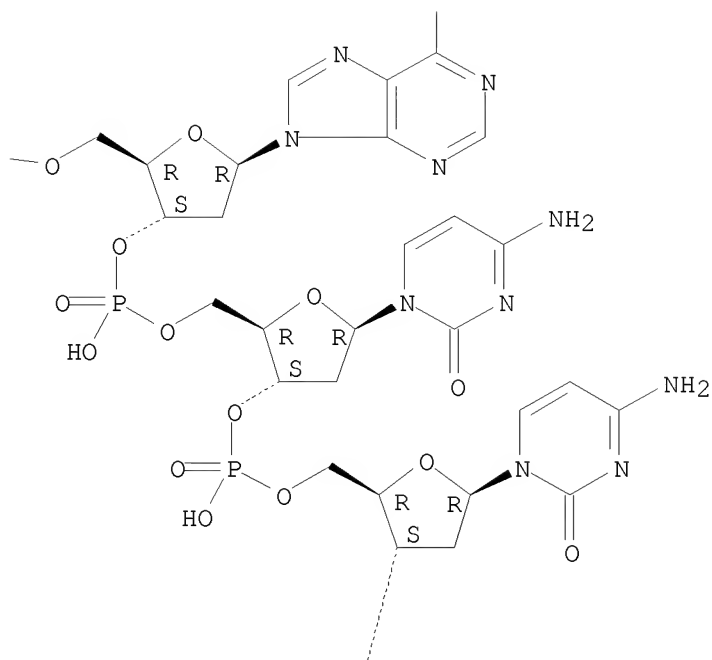
CRN 254745-10-3

CMF C76 H98 N29 O45 P7

Absolute stereochemistry.

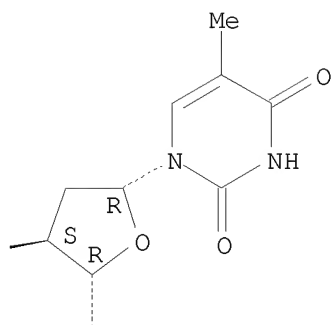
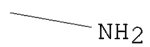
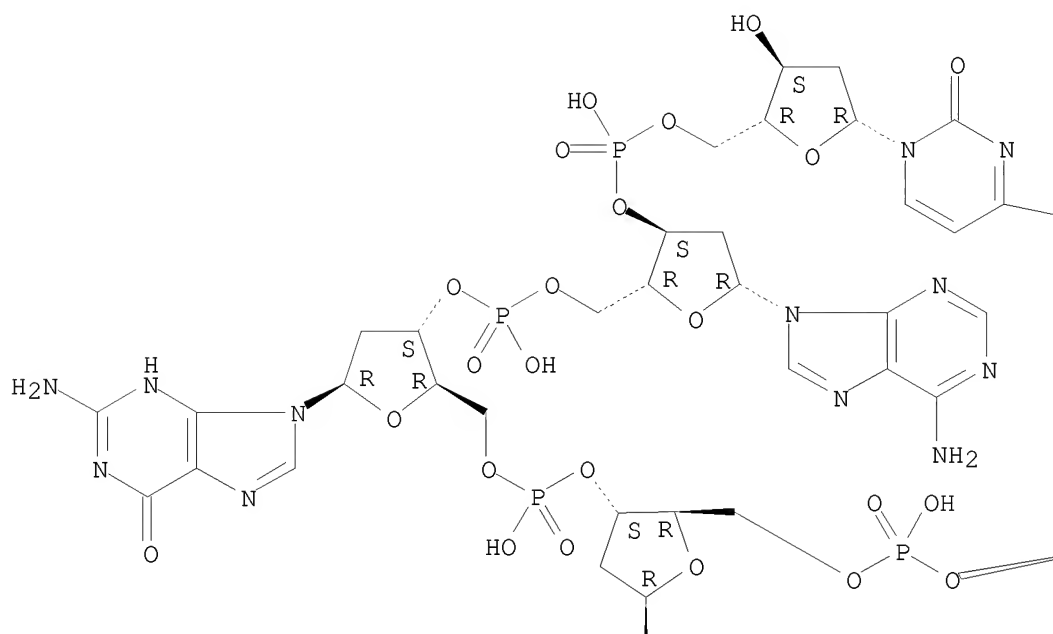




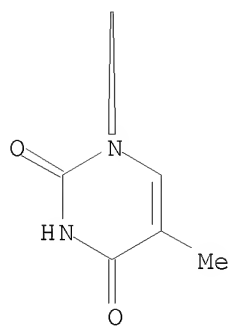


RN 1007861-00-8 CAPLUS
 CN Thymidine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-, complex with
 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)
 CM 1
 CRN 1007858-30-1
 CMF C100 H124 N30 O55 P8

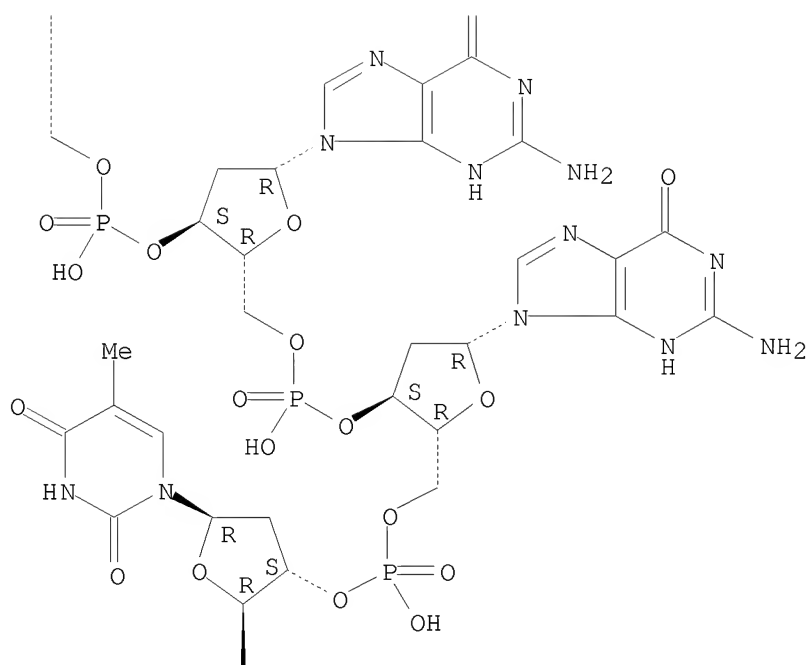
Absolute stereochemistry.
 Double bond geometry as shown.



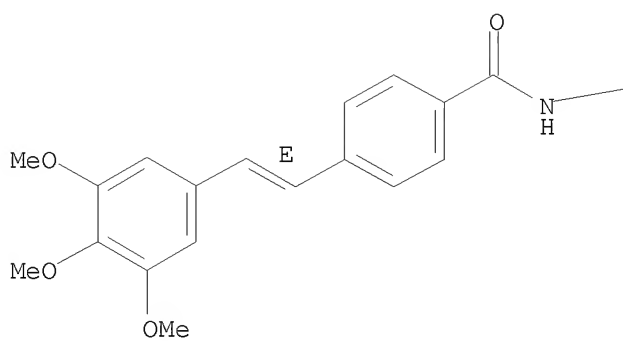
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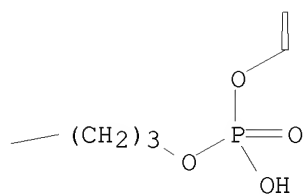


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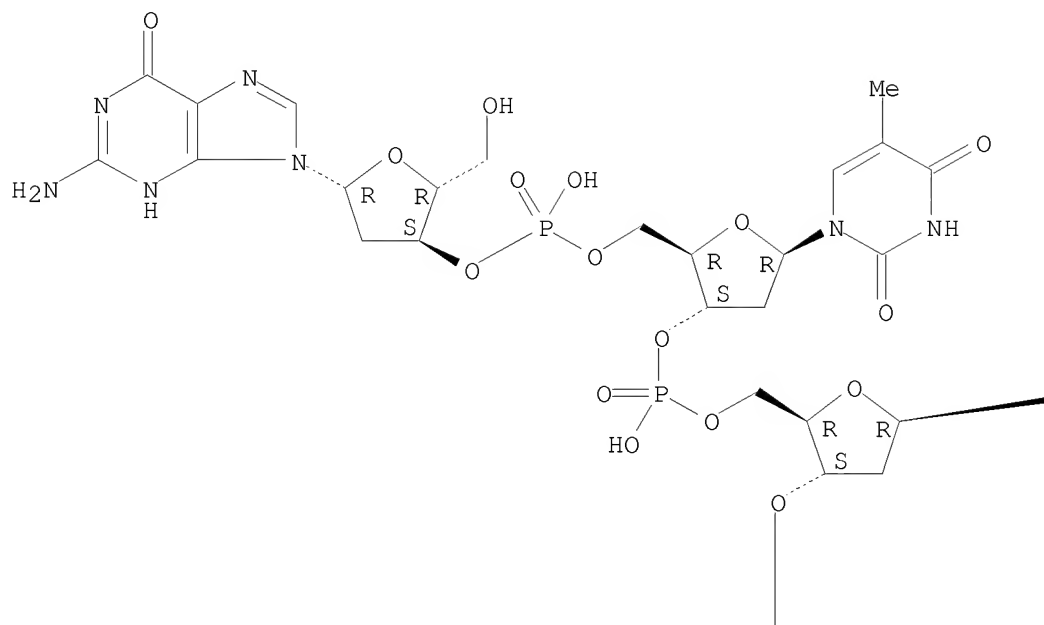


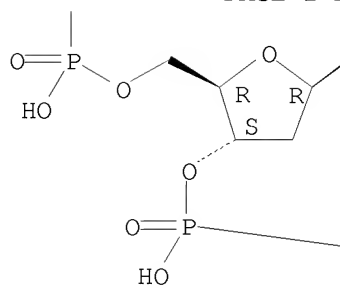
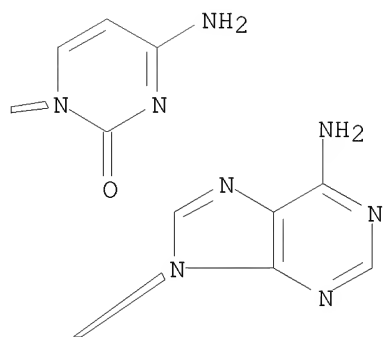
CM 2

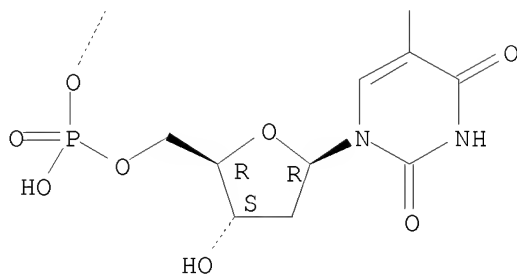
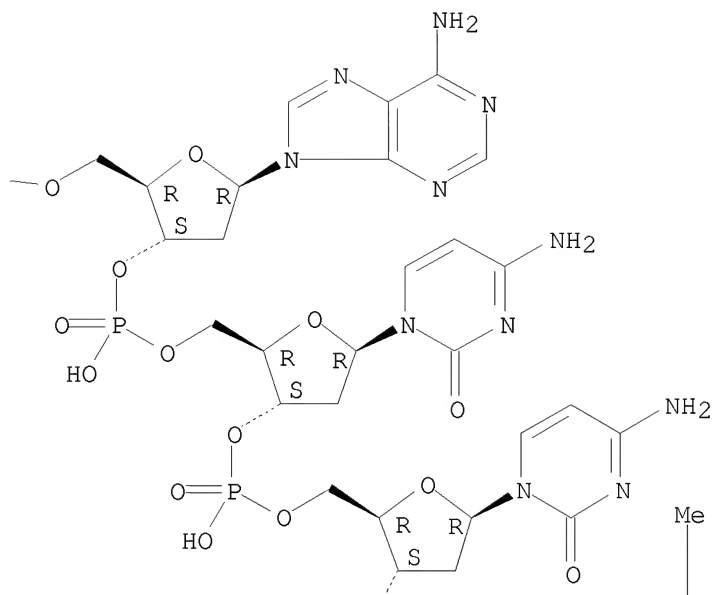
CRN 227078-78-6

CMF C77 H99 N28 O46 P7

Absolute stereochemistry.



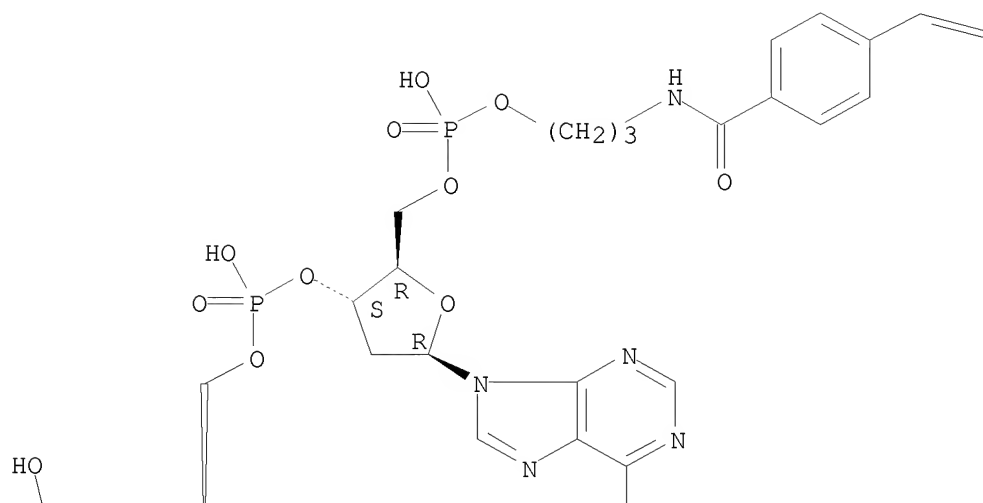




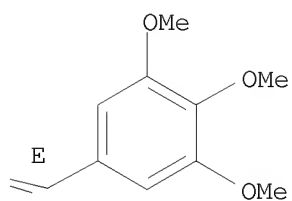
RN 1007861-04-2 CAPLUS
 CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
 2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]adenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)
 CM 1
 CRN 1007858-84-5
 CMF C100 H123 N33 O53 P8

Absolute stereochemistry.
 Double bond geometry as shown.

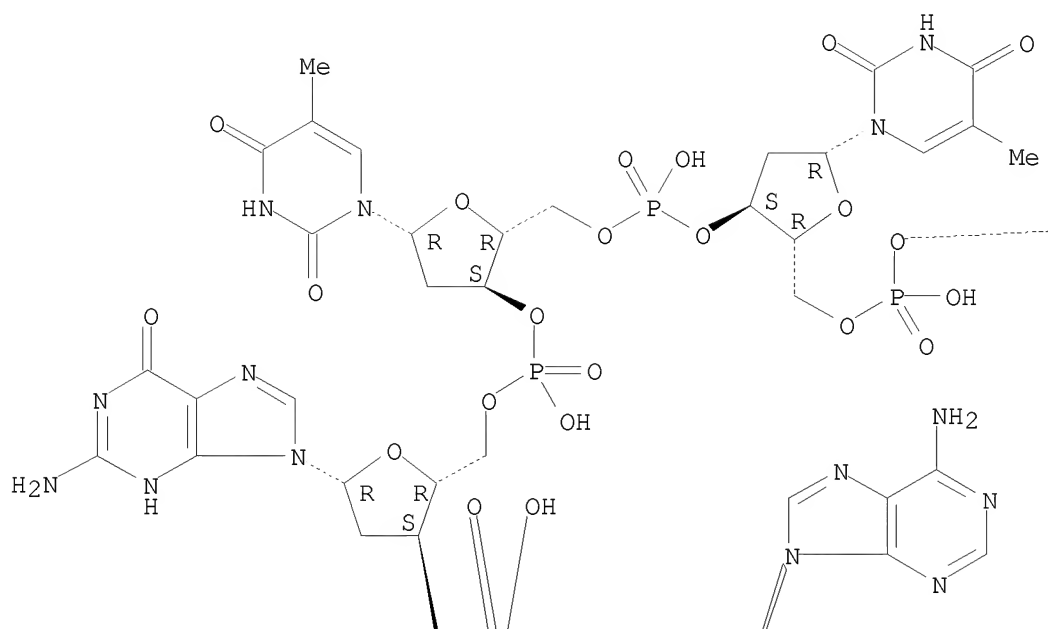
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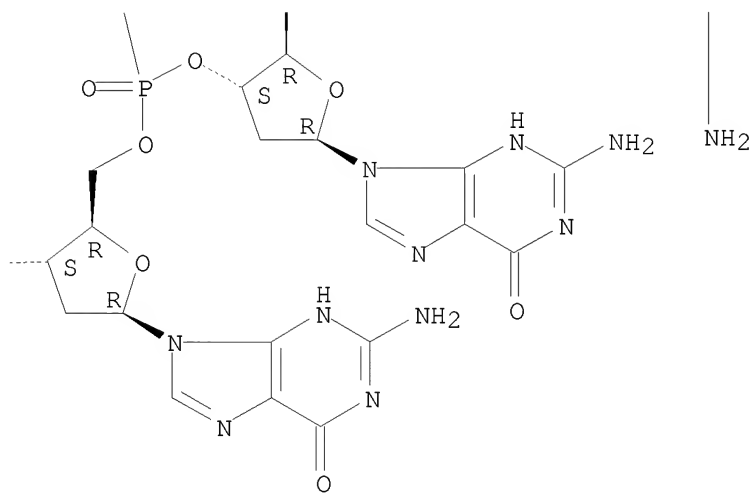
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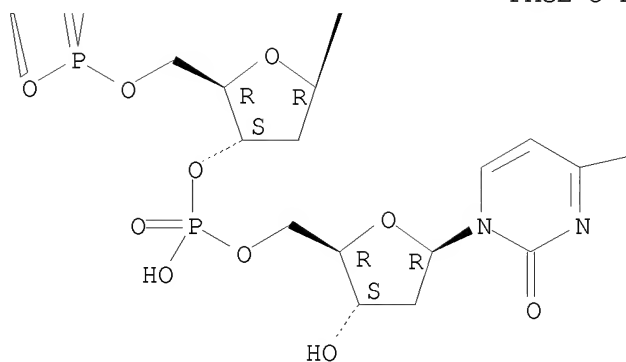
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NH₂

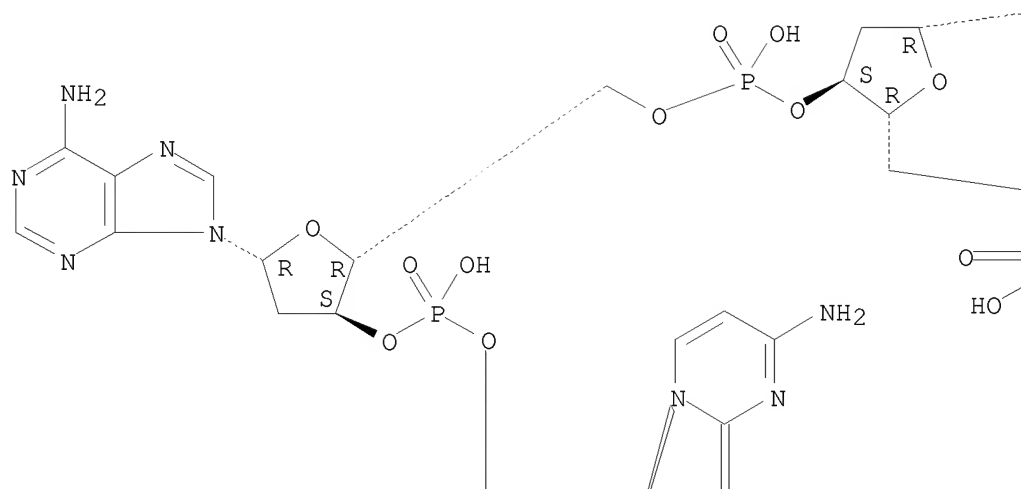
CM 2

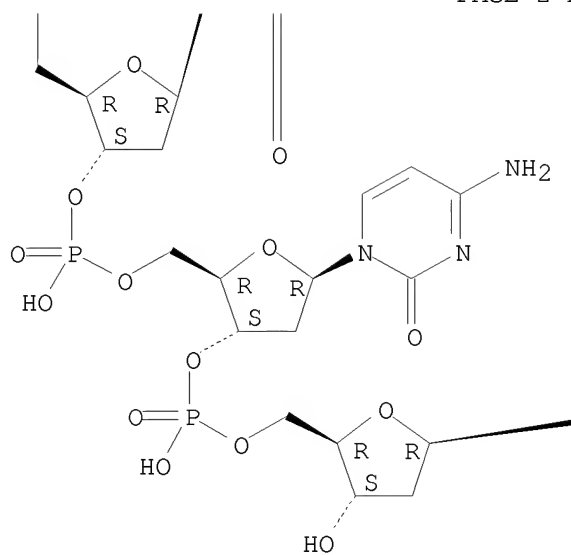
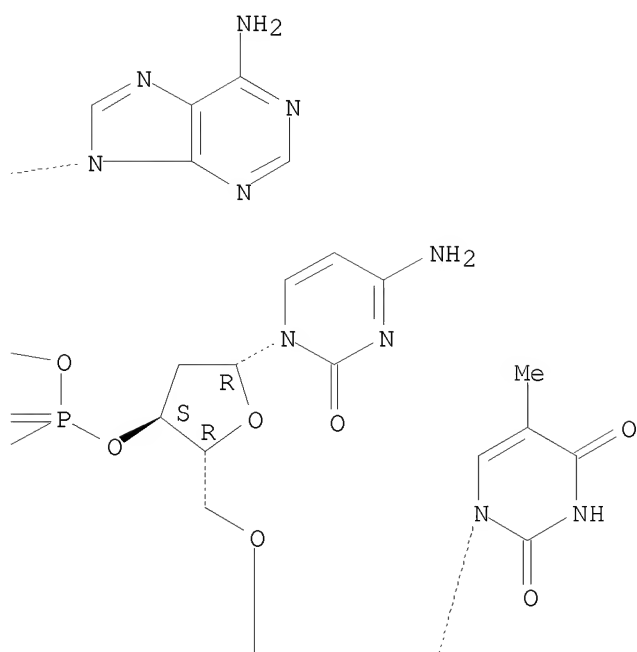
CRN 252236-06-9

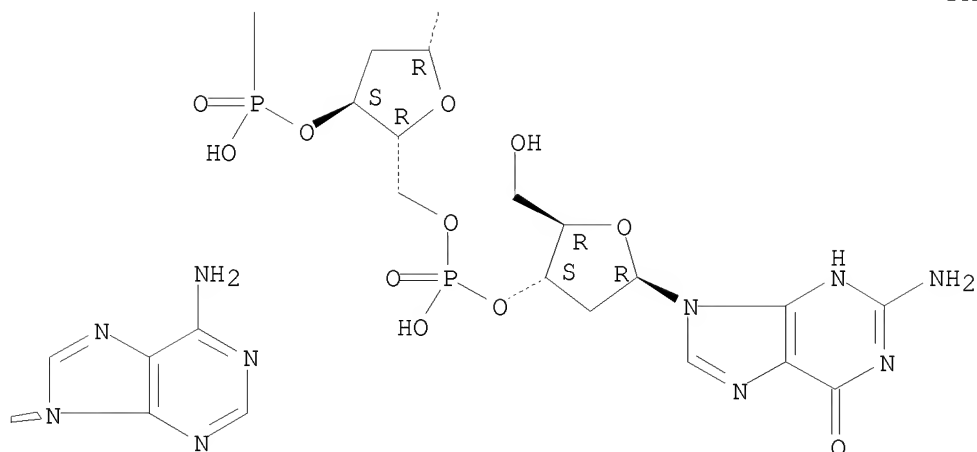
CMF C77 H98 N31 O44 P7

Absolute stereochemistry.

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RN 1007861-11-1 CAPLUS

CN Adenosine, 2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxy-, complex with
 2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]guanylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxycytidine (1:1) (CA INDEX NAME)

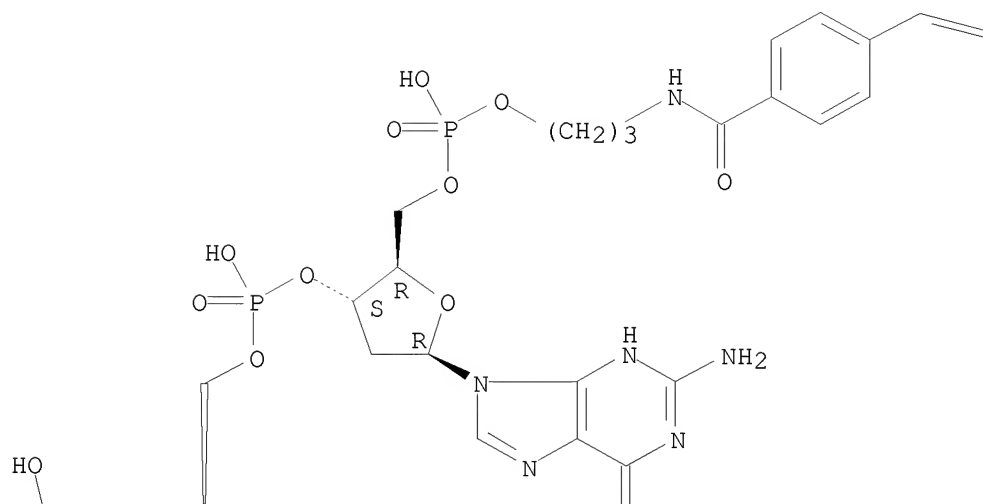
CM 1

CRN 1007860-45-8

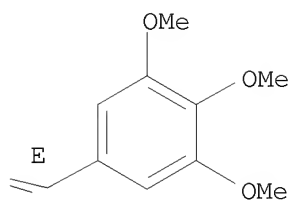
CMF C100 H123 N33 O54 P8

Absolute stereochemistry.
 Double bond geometry as shown.

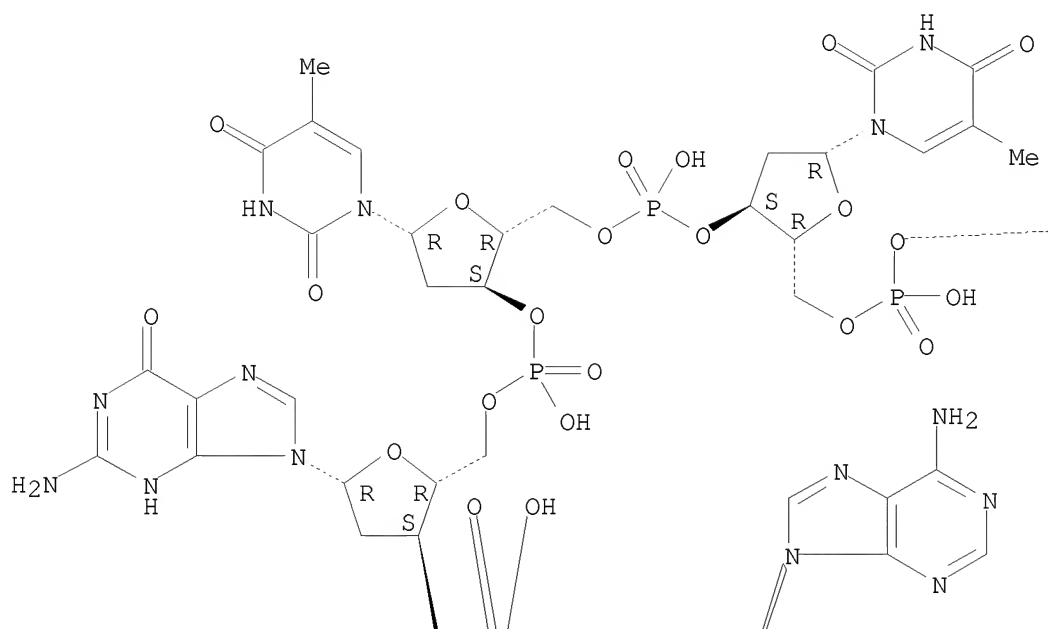
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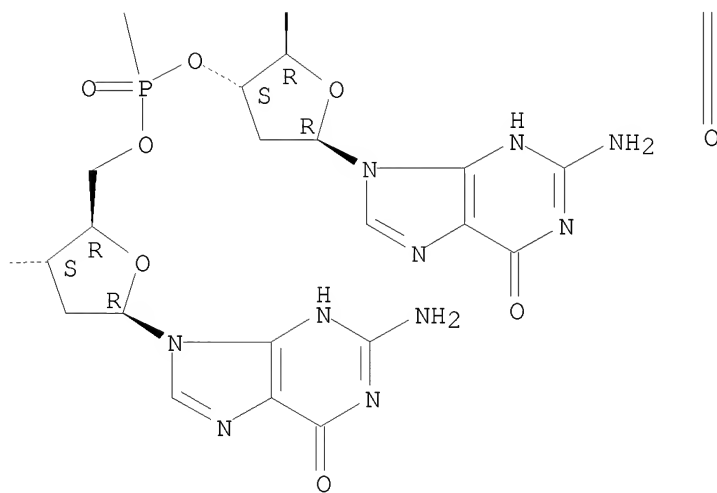
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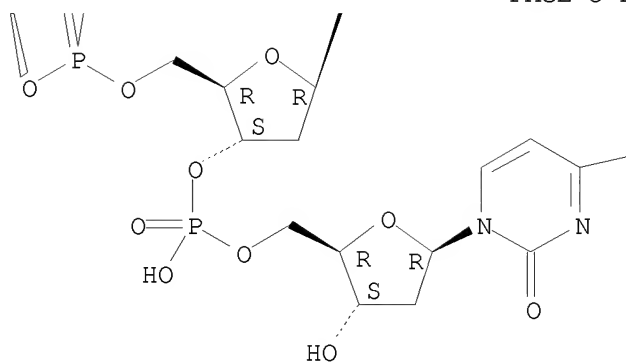
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NH₂

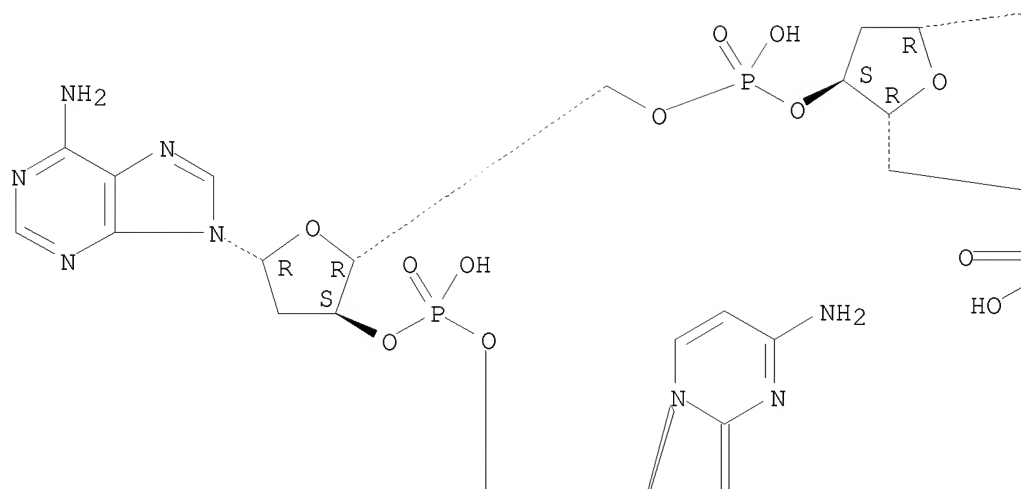
CM 2

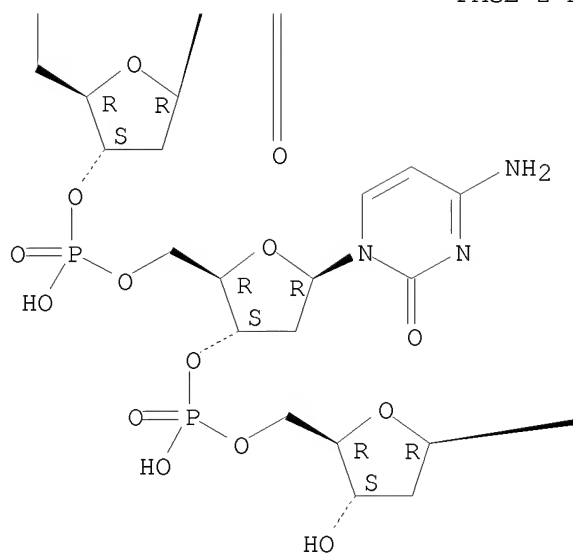
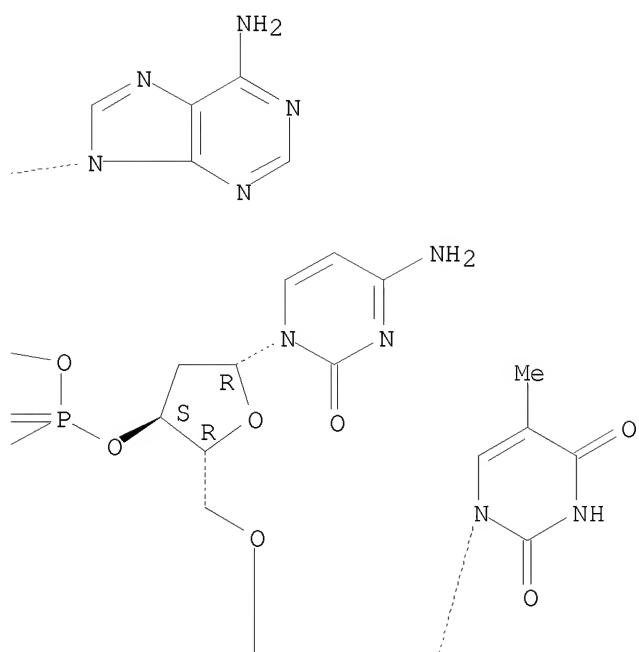
CRN 252236-06-9

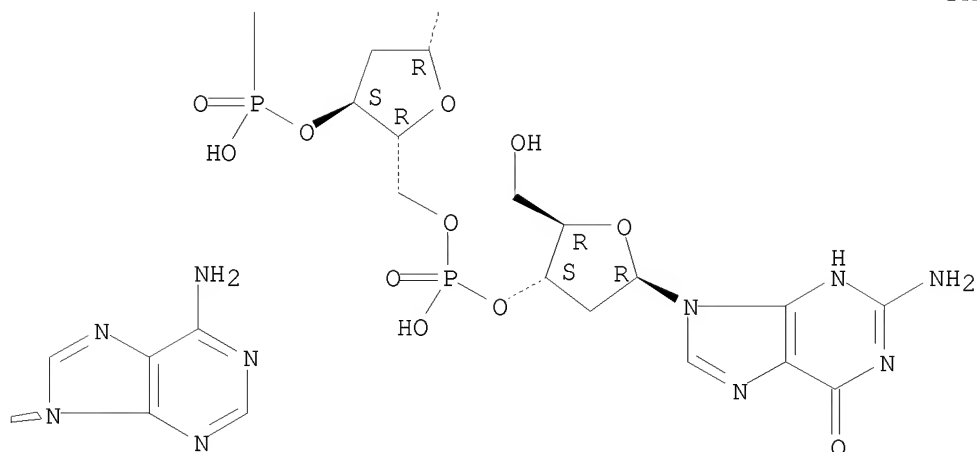
CMF C77 H98 N31 O44 P7

Absolute stereochemistry.

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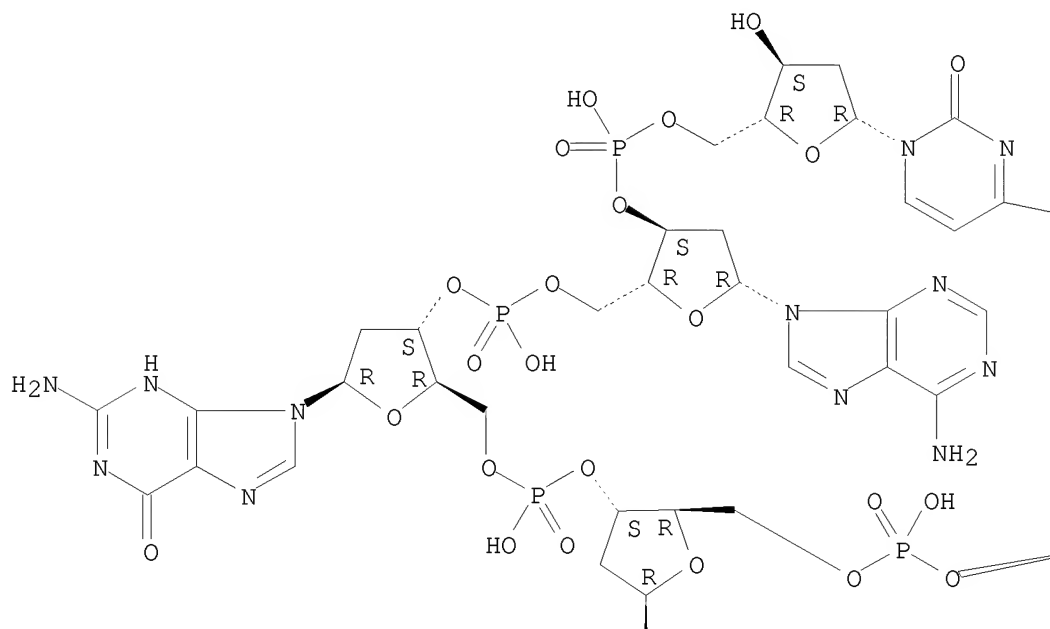




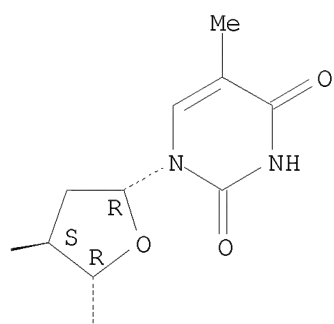
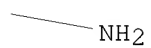


IT 1007858-30-1P 1007858-76-5P 1007858-84-5P
 1007860-45-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (5'-tethered stilbene derivs. act as fidelity- and affinity-enhancing
 modulators of DNA duplex stability)
 RN 1007858-30-1 CAPLUS
 CN Cytidine, 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-
 trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-
 (3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-
 (CA INDEX NAME)

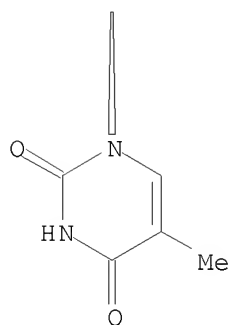
Absolute stereochemistry.
 Double bond geometry as shown.

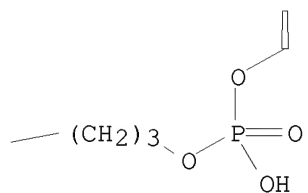
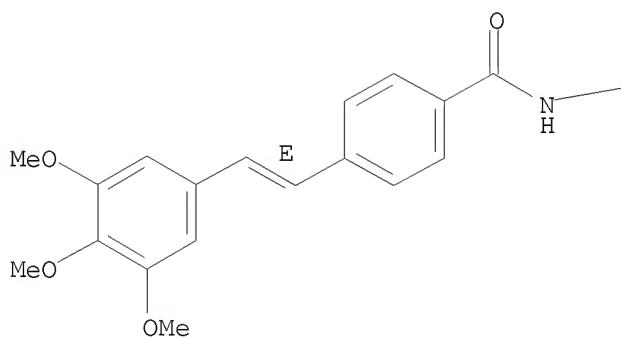
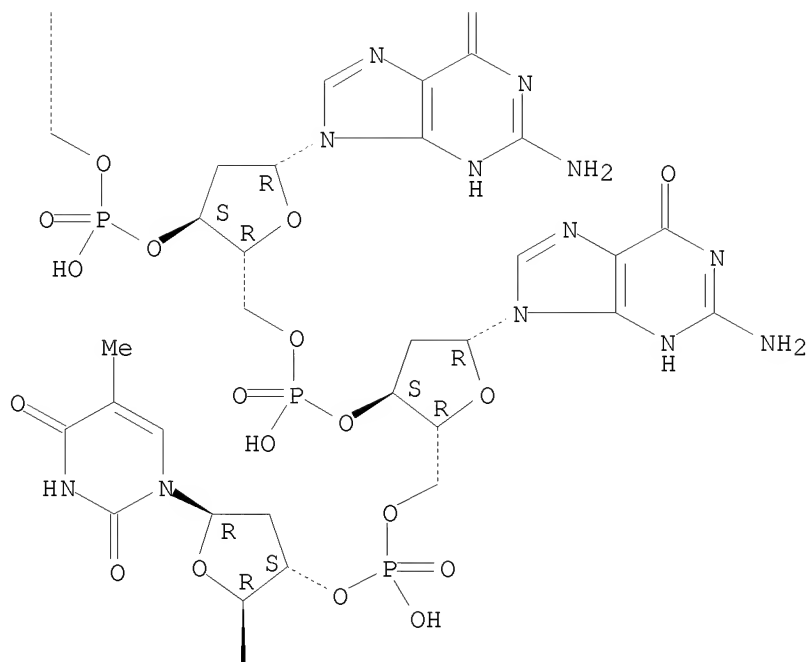


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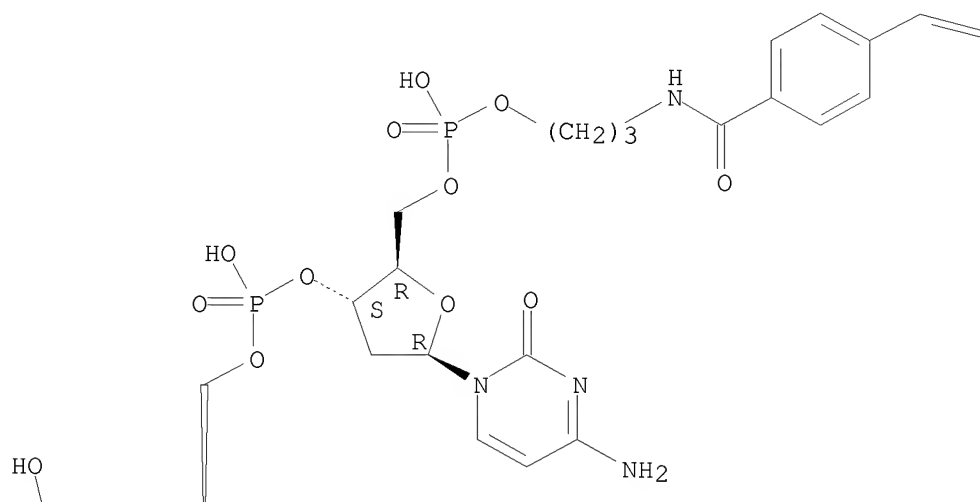


RN 1007858-76-5 CAPLUS
CN Cytidine, 2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]cytidyl-yl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-

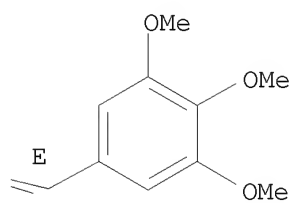
(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-
 (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

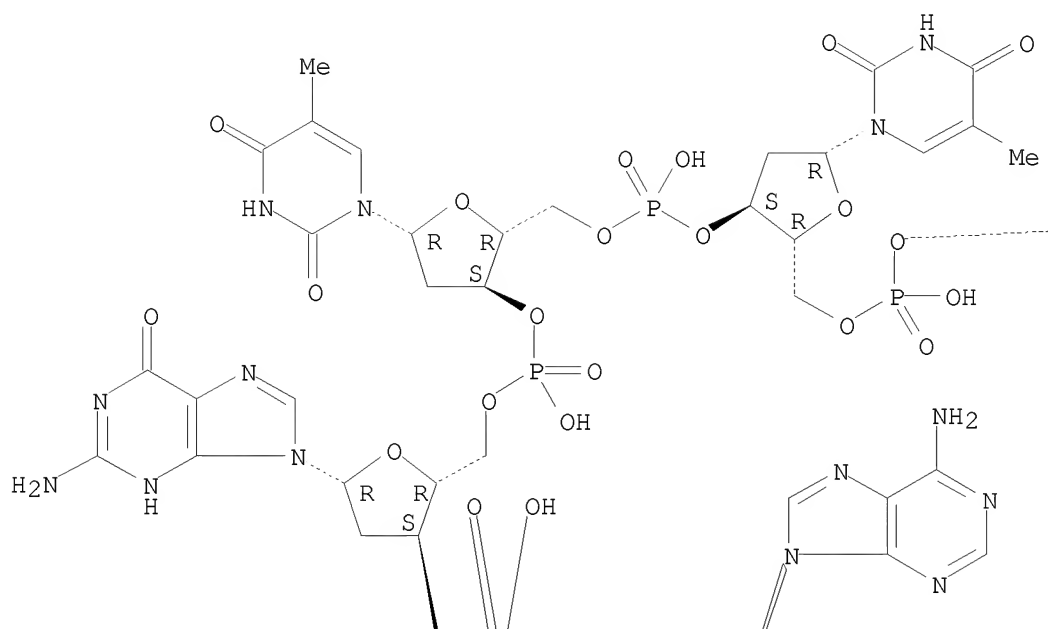
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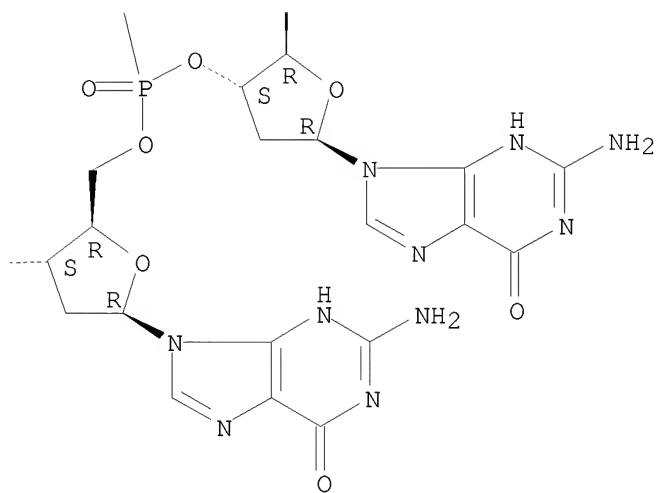
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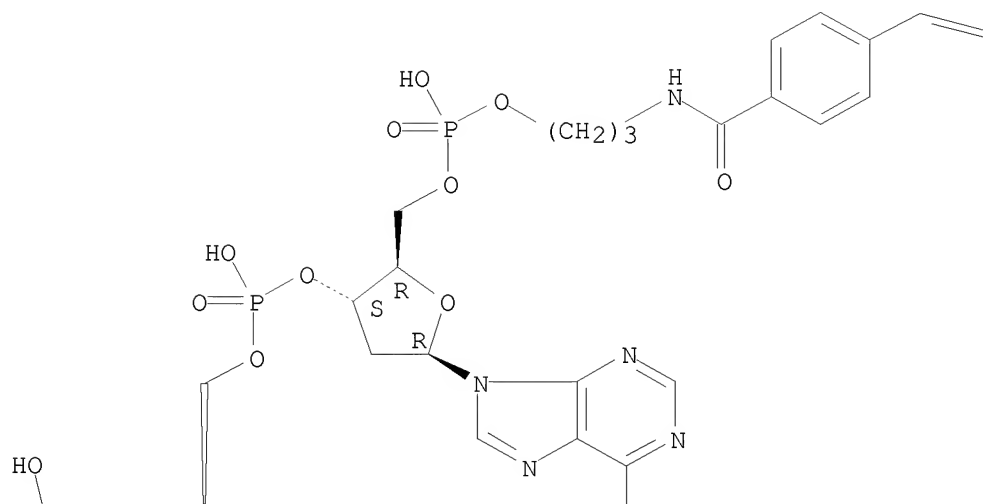
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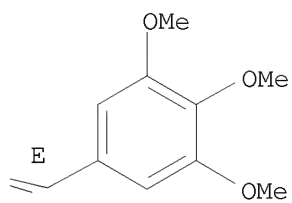
CN Cytidine, 2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]adenylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

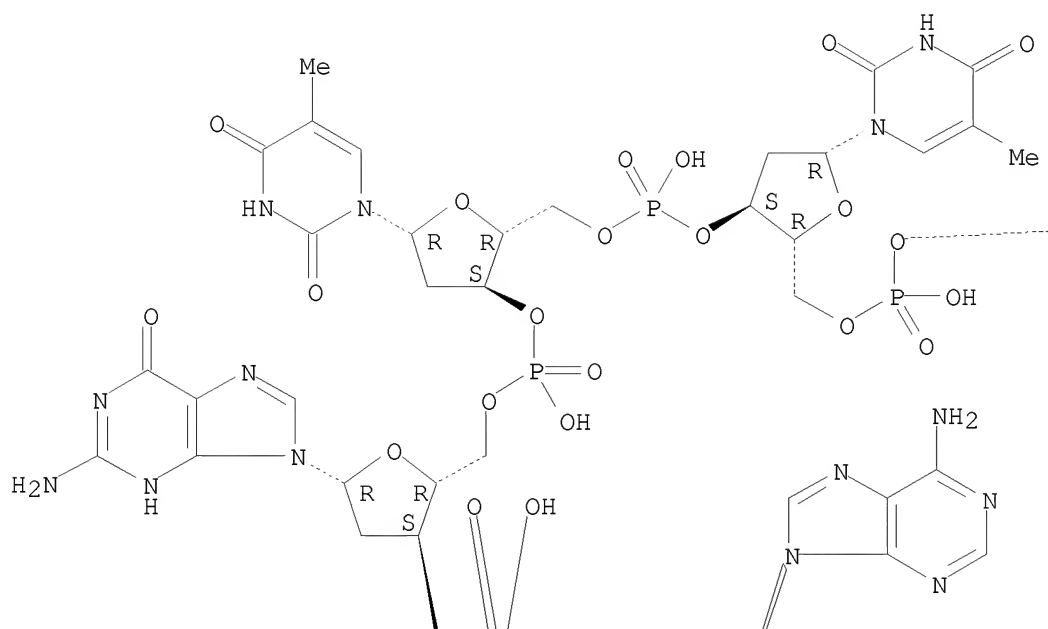
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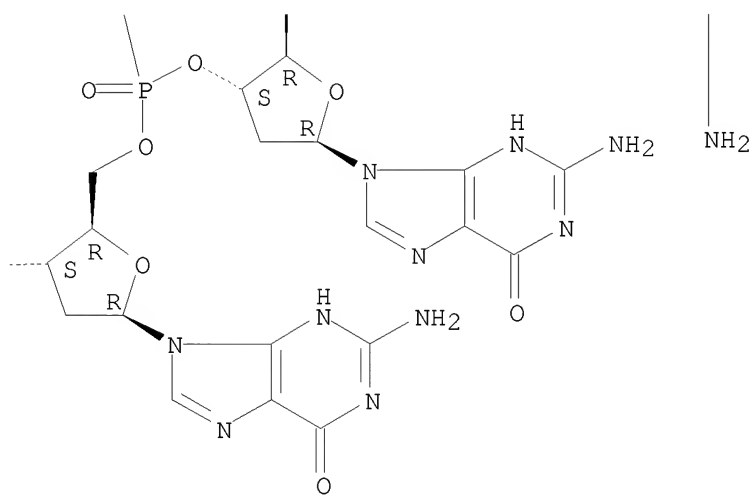
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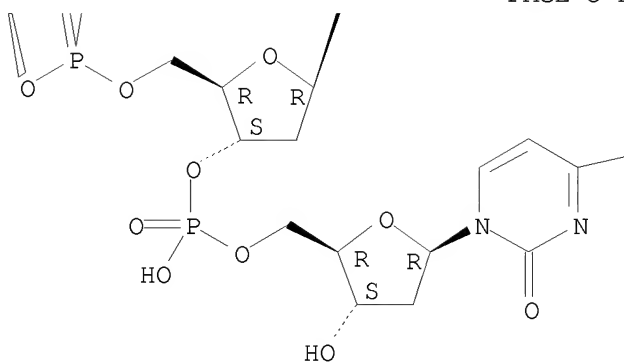
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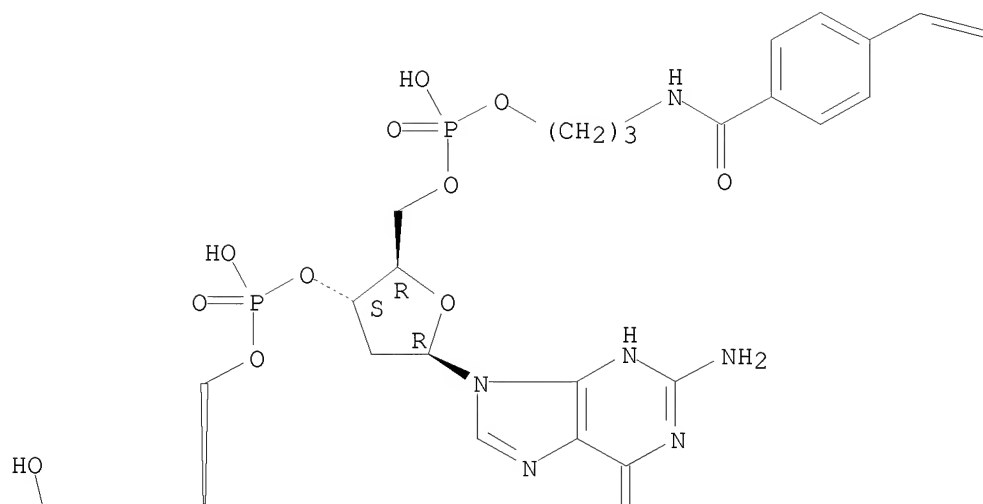
—NH₂

RN 1007860-45-8 CAPLUS

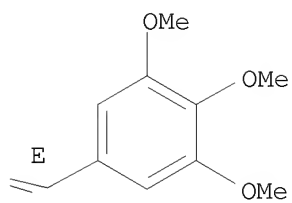
CN Cytidine, 2'-deoxy-5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]guanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

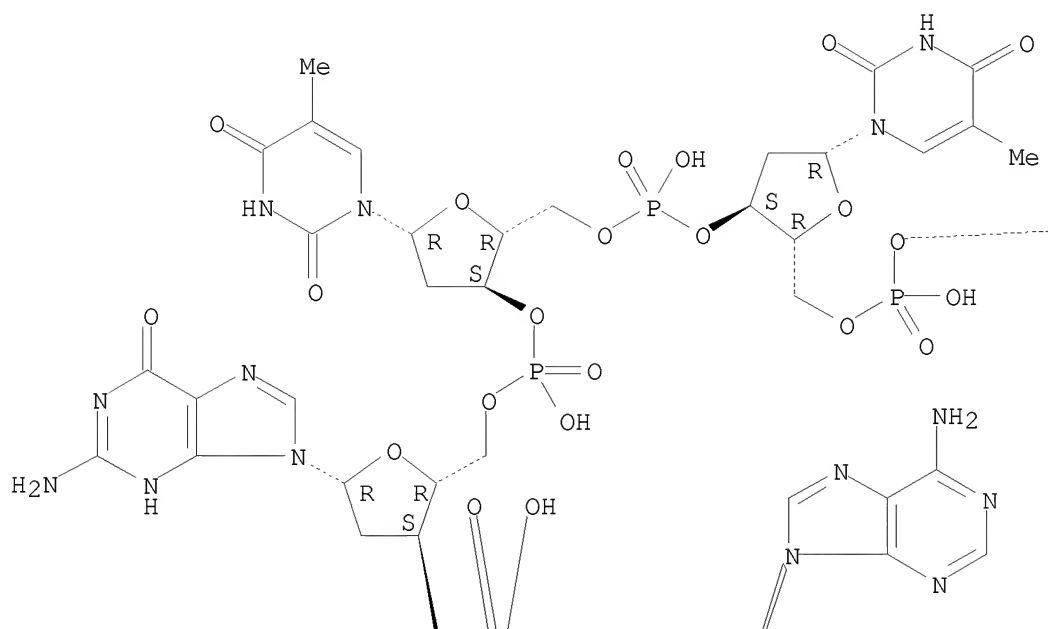
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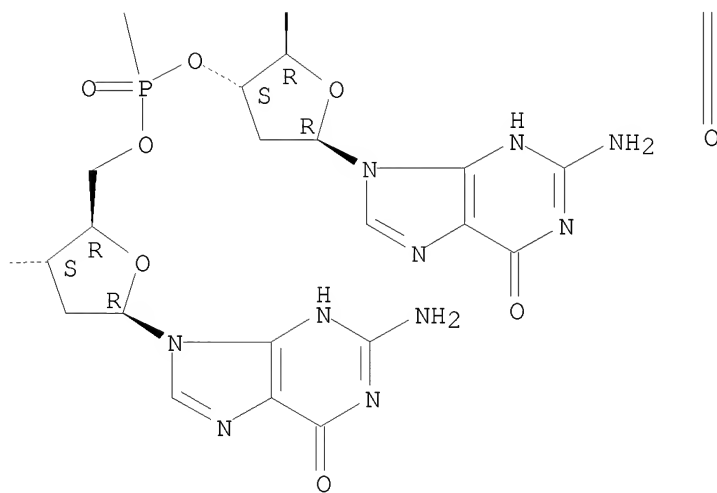
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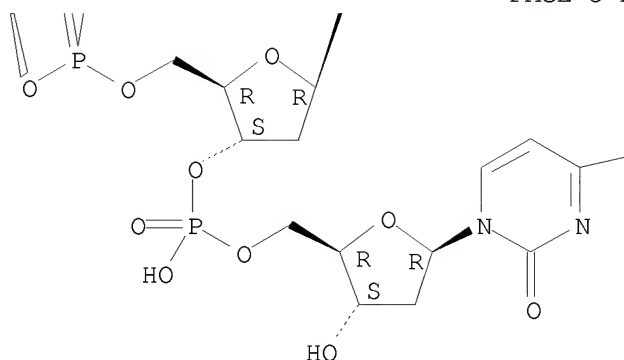


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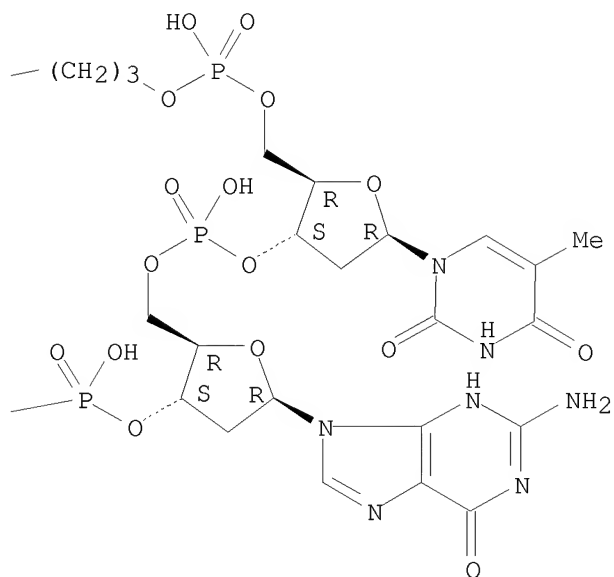
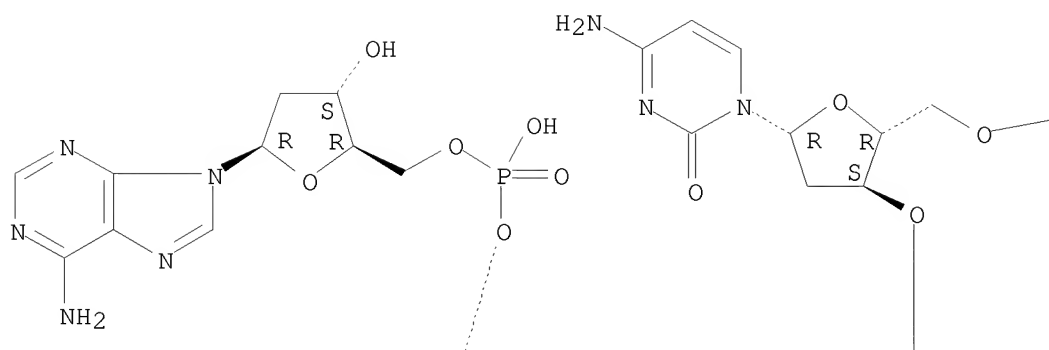
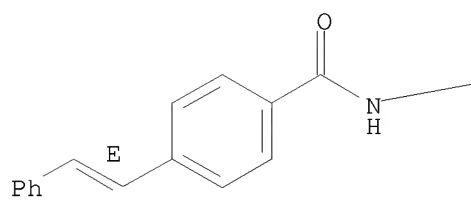


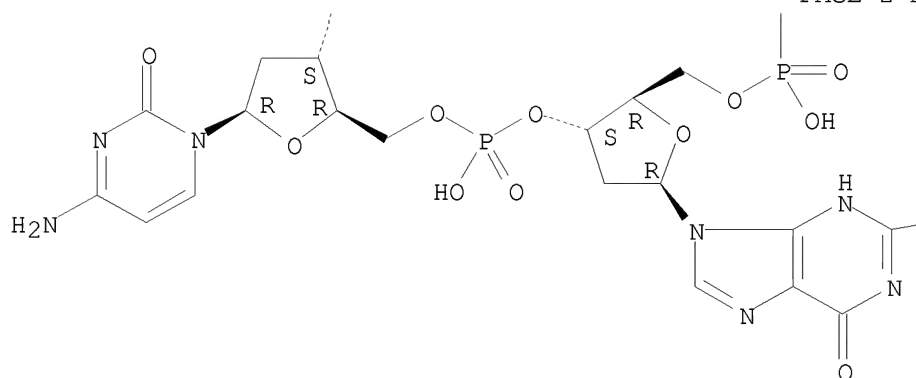


—NH₂

IT 1007858-46-9P 1007858-54-9P 1007858-57-2P
 1007858-60-7P 1007858-63-0P 1007858-66-3P
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (self-complementary; 5'-tethered stilbene derivs. act as fidelity- and affinity-enhancing modulators of DNA duplex stability)
 RN 1007858-46-9 CAPLUS
 CN Adenosine, 5'-O-[hydroxy[3-[[4-[(1E)-2-phenylethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy-(CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



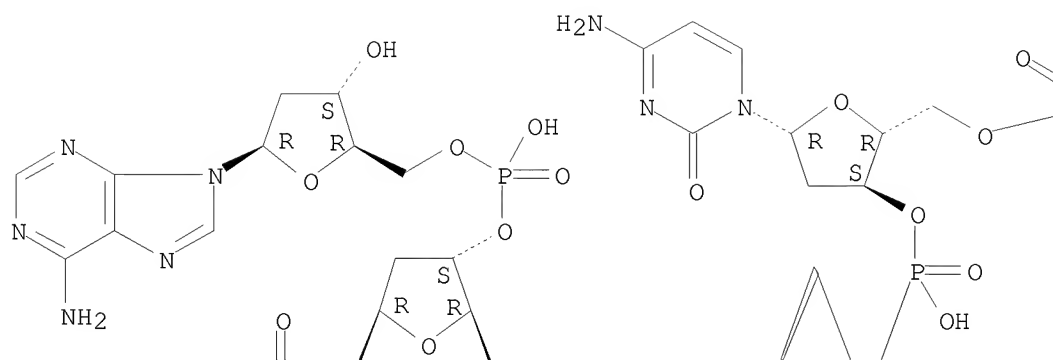


— NH₂

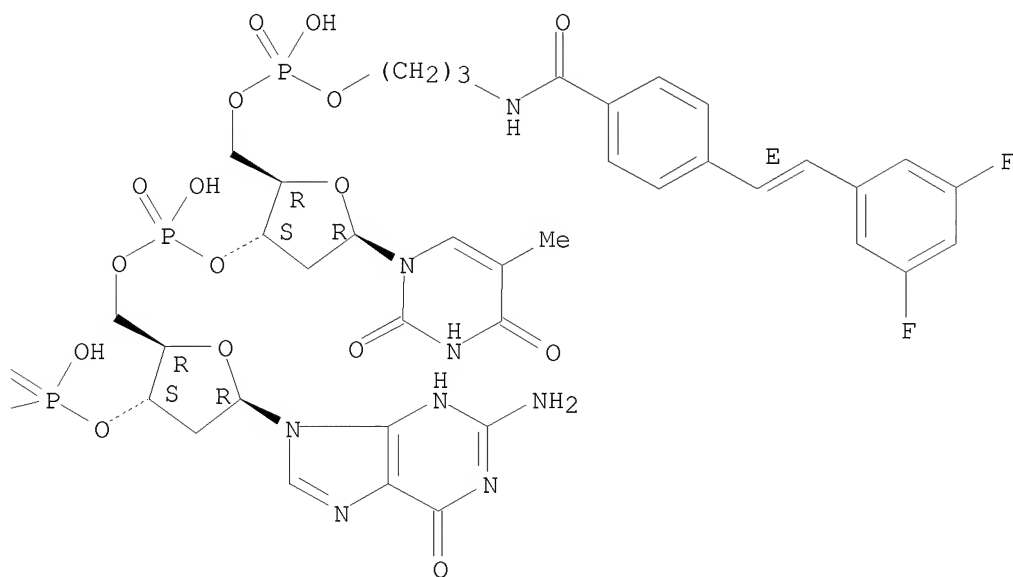
RN 1007858-54-9 CAPLUS
 CN Adenosine, 5'-O-[[3-[[4-[(1E)-2-(3,5-difluorophenyl)ethenyl]benzoyl]amino]propoxy]hydroxyphosphinyl]thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy- (CA INDEX NAME)

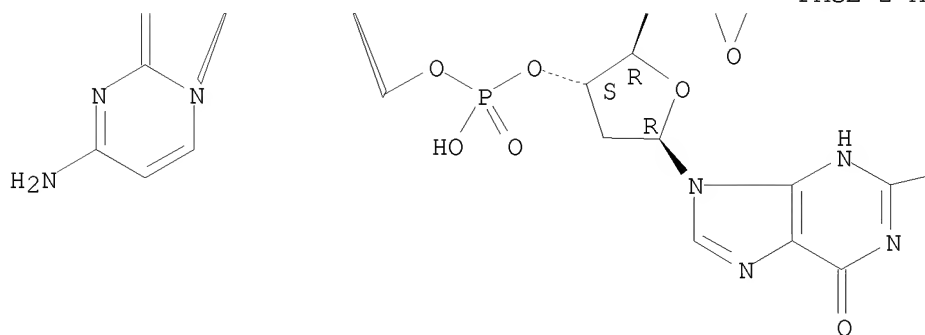
Absolute stereochemistry.
 Double bond geometry as shown.

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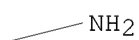


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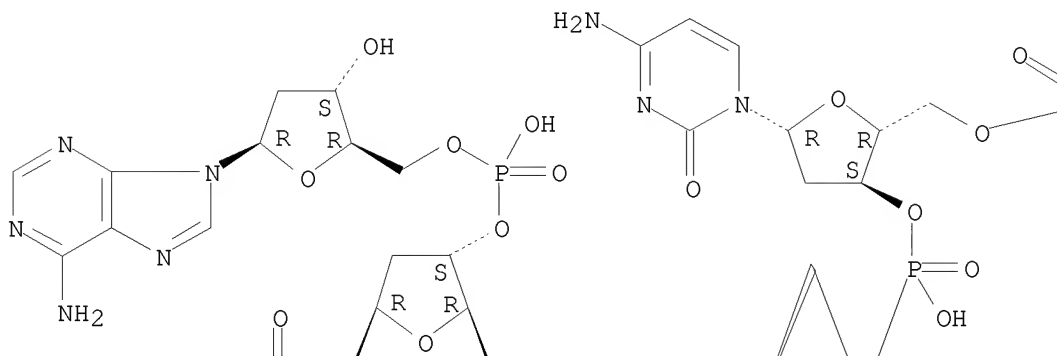
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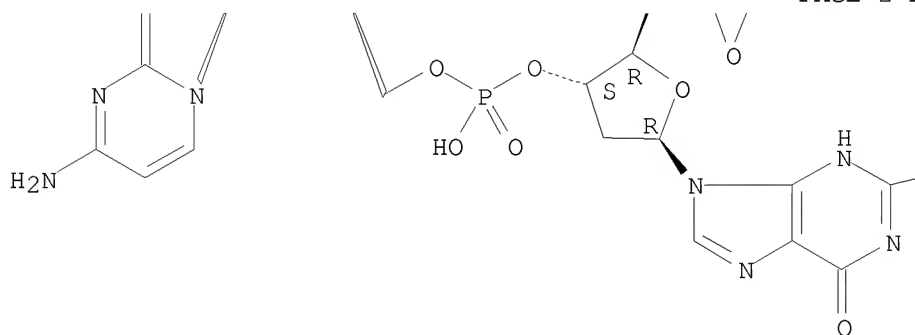
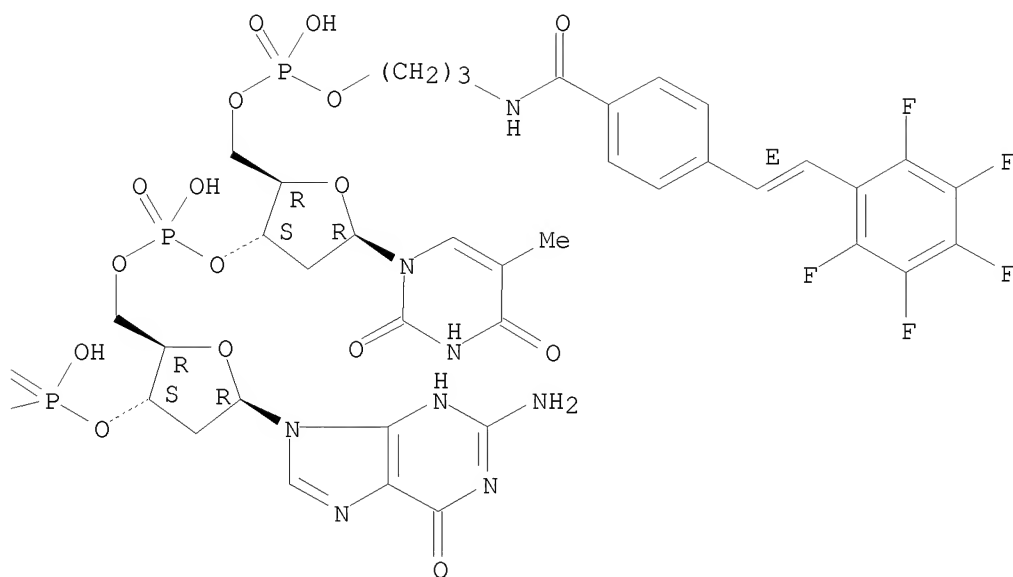


RN 1007858-57-2 CAPLUS
 CN Adenosine, 5'-O-[hydroxy[3-[[4-[(1E)-2-(2,3,4,5,6-pentafluorophenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

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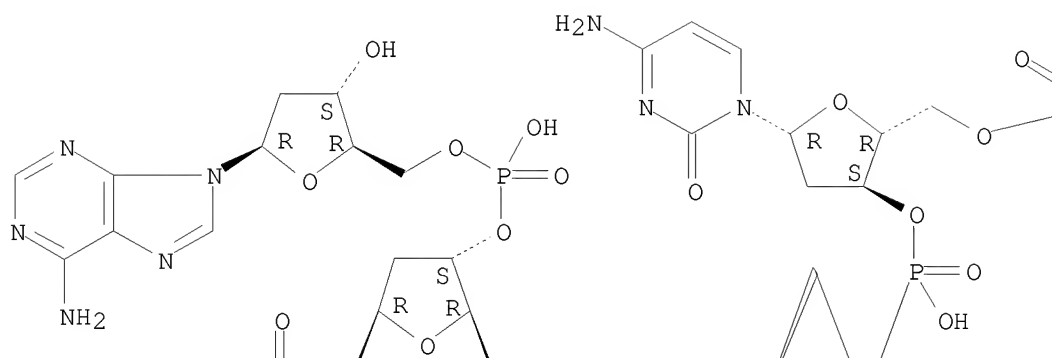




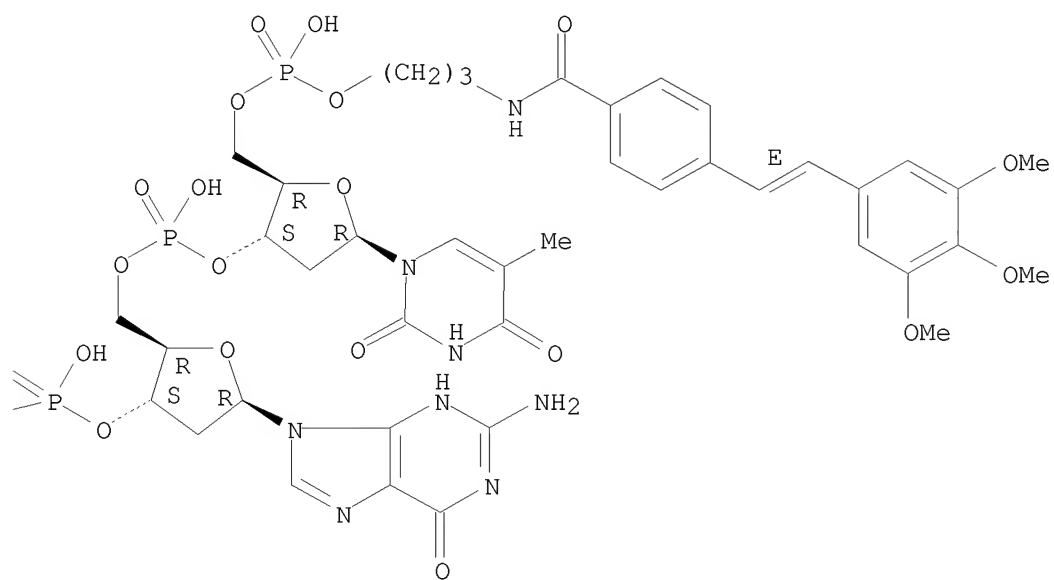
RN 1007858-60-7 CAPLUS
 CN Adenosine, 5'-O-[hydroxy[3-[[4-[(1E)-2-(3,4,5-trimethoxyphenyl)ethenyl]benzoyl]amino]propoxy]phosphinyl]thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy- (CA INDEX NAME)

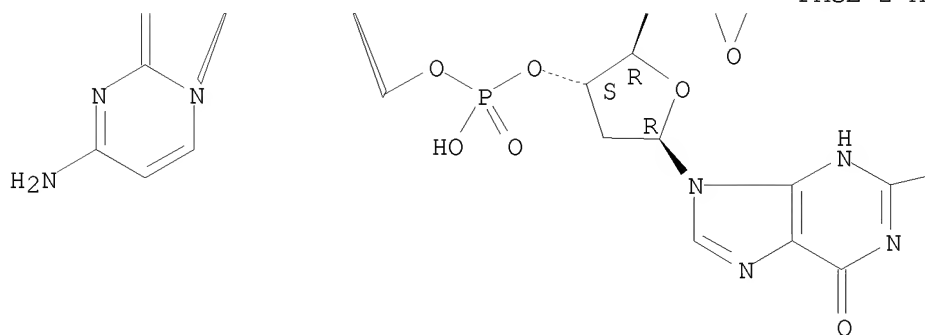
Absolute stereochemistry.
Double bond geometry as shown.

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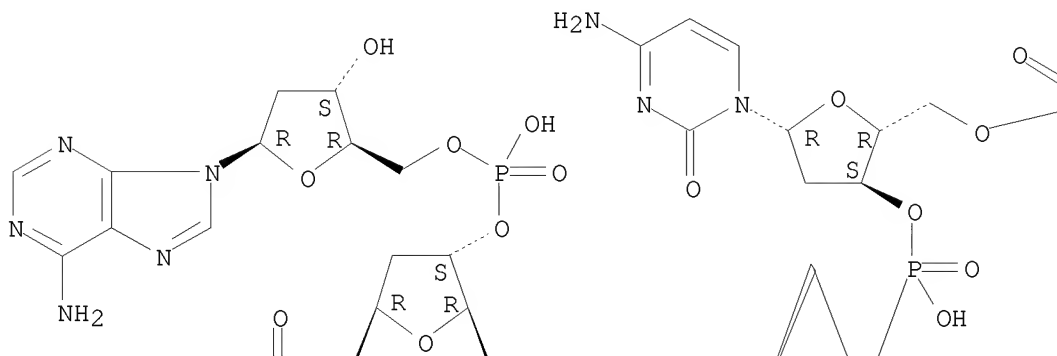
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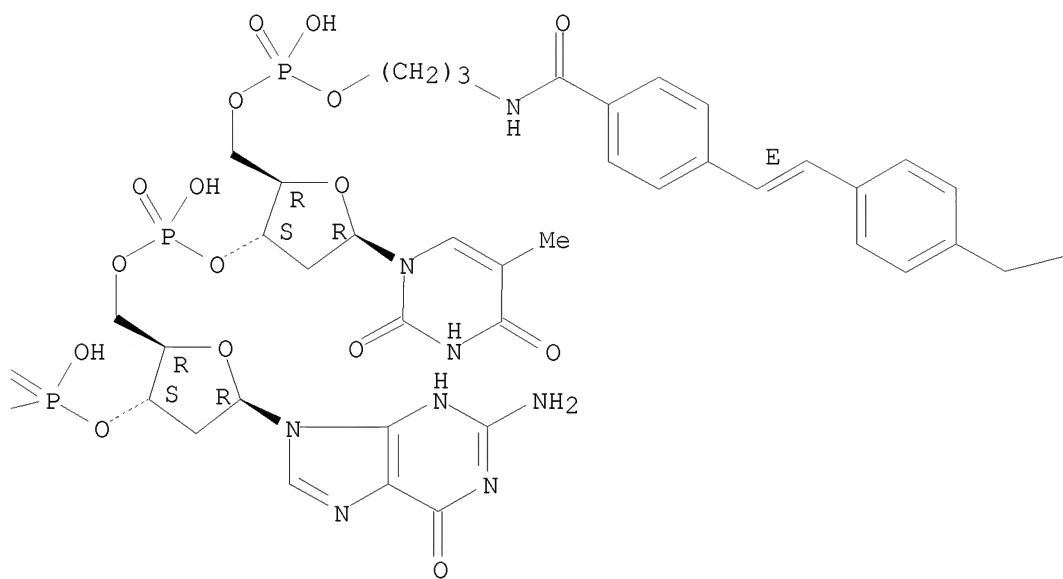
RN 1007858-63-0 CAPLUS
 CN Adenosine, 5'-O-[hydroxy[3-[[4-[(1E)-2-[4-[[[(2-propen-1-
 yloxy)carbonyl]amino]methyl]phenyl]ethenyl]benzoyl]amino]propoxy]phosphiny
 l]thymidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-
 deoxycytidylyl-(3'→5')-2'-deoxy- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

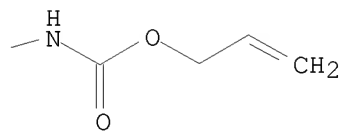
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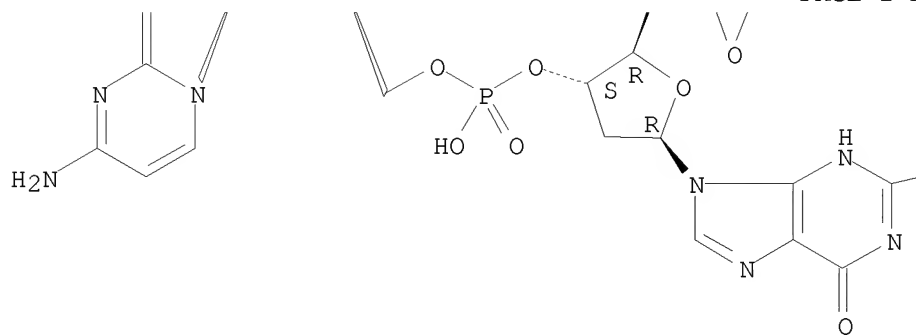
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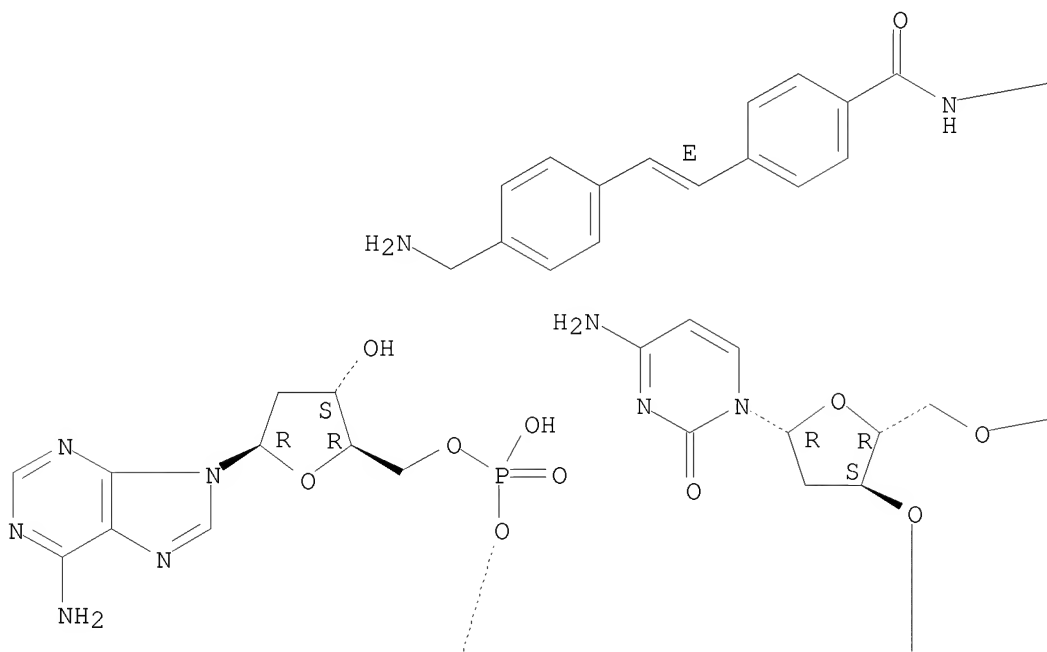


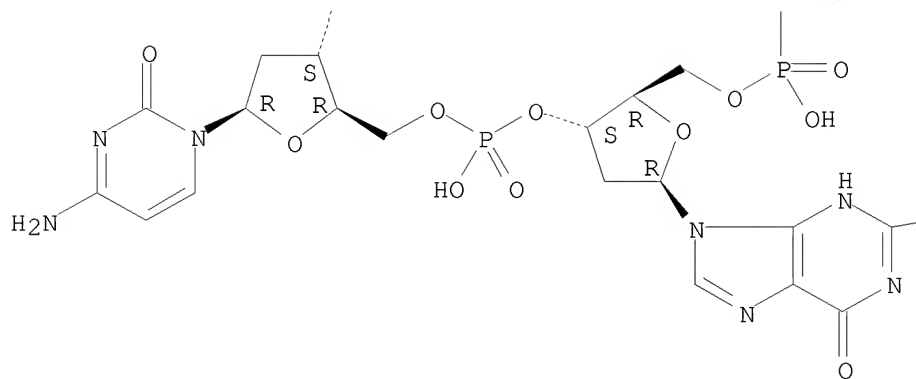
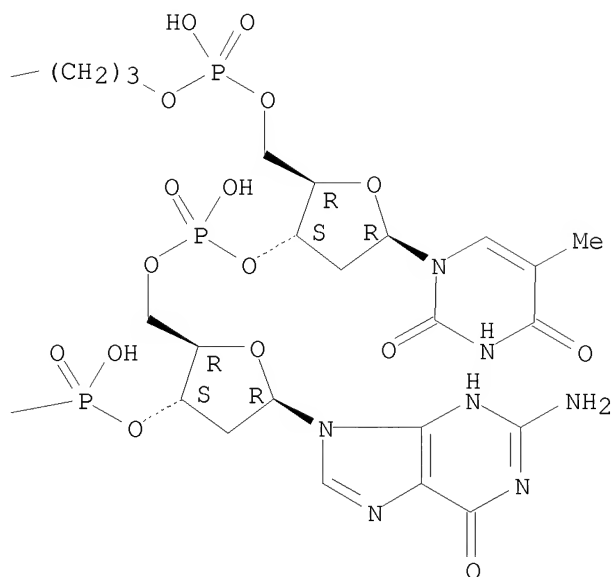


RN 1007858-66-3 CAPLUS

CN Adenosine, 5'-O-[[3-[[4-[(1E)-2-[4-(aminomethyl)phenyl]ethenyl]benzoyl]amino]propoxy]hydroxyphosphinyl]thymidyl- (3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxy- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.





OS.CITING REF COUNT: 36 THERE ARE 36 CAPLUS RECORDS THAT CITE THIS
 RECORD (37 CITINGS)
 REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2003:758919 CAPLUS
DOCUMENT NUMBER: 139:392609
TITLE: Stepwise Evolution of the Structure and Electronic Properties of DNA
AUTHOR(S): Lewis, Frederick D.; Liu, Xiaoyang; Wu, Yansheng; Zuo, Xiaobing
CORPORATE SOURCE: Department of Chemistry, Northwestern University, Evanston, IL, 60208-3113, USA
SOURCE: Journal of the American Chemical Society (2003), 125(42), 12729-12731
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The optical properties of a family of duplex DNA conjugates possessing from 1 to 11 A:T base pairs and covalently attached stilbene chromophores at both ends have been investigated. As few as from two to four base pairs are needed to establish base-pair absorption and CD spectra similar to those of longer oligomers. The stilbene chromophores exhibit exciton-coupled CD, which can be observed even with 11 intervening base pairs, a distance of .apprx.40 Å. The dependence of the sign and amplitude of these spectra reveals the ability of B-DNA to serve as a helical ruler.

IT 625096-09-5 625096-10-8 625096-11-9
625096-12-0

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(stepwise changes in structure and electronic properties of DNA)

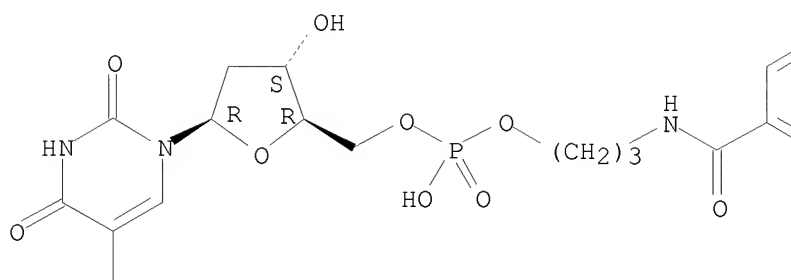
RN 625096-09-5 CAPLUS

CN Thymidine, 2'-deoxy-5'-O-[hydroxy[3-[[4-[2-[4-[[3-hydroxypropyl)amino]carbonyl]phenyl]ethenyl]benzoyl]amino]propoxy]phosphinyl]adenylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-(9CI) (CA INDEX NAME)

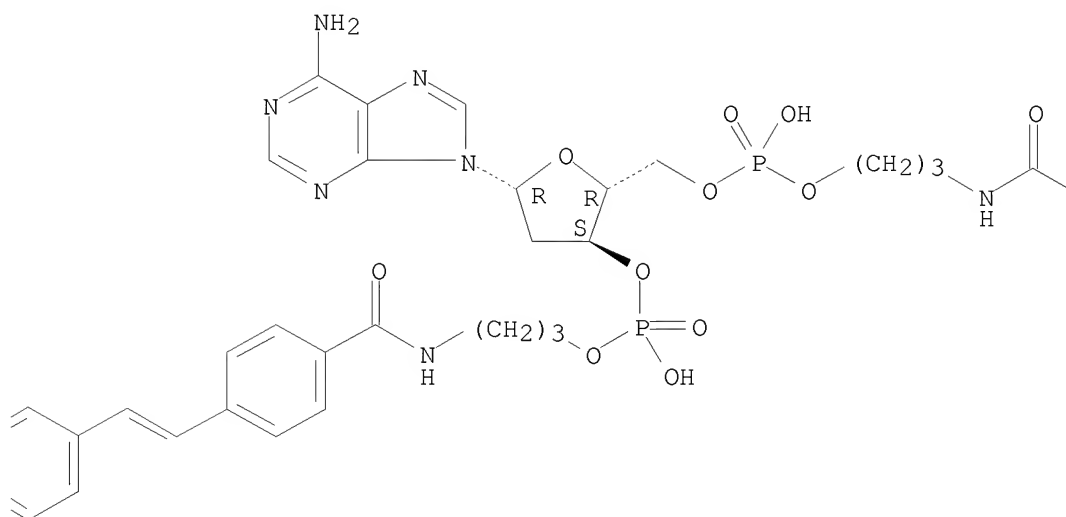
Absolute stereochemistry.

Double bond geometry unknown.

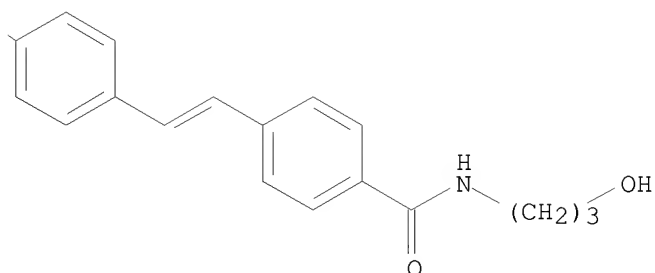
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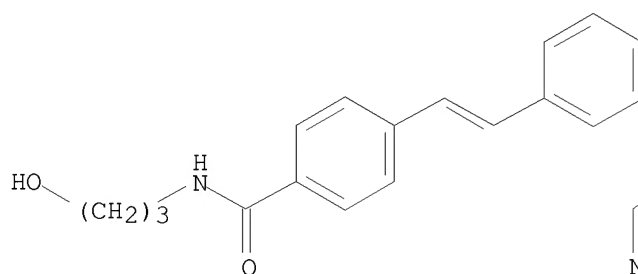
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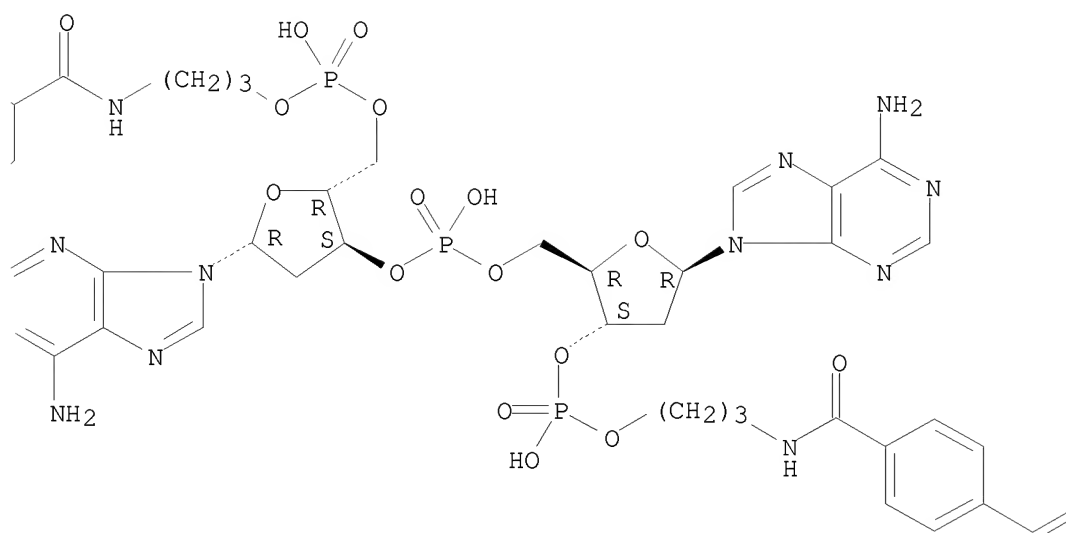
RN 625096-10-8 CAPLUS
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(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

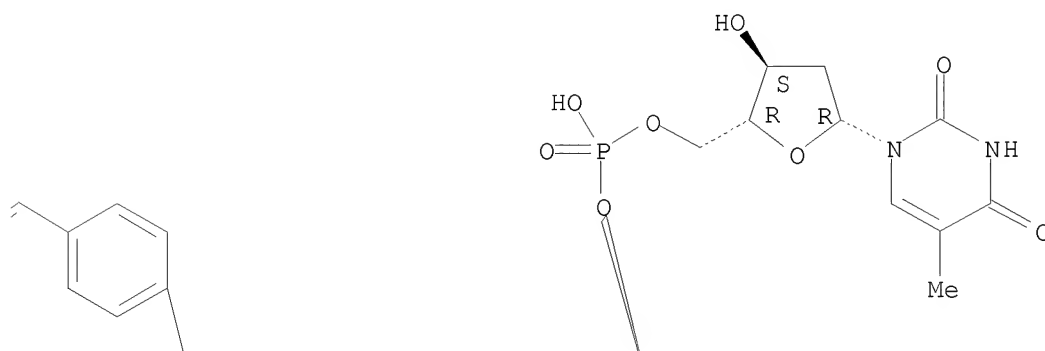
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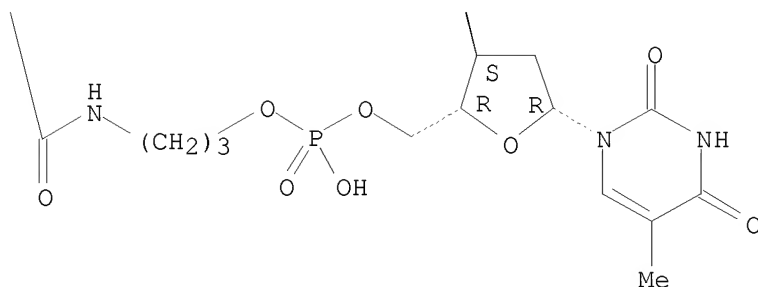


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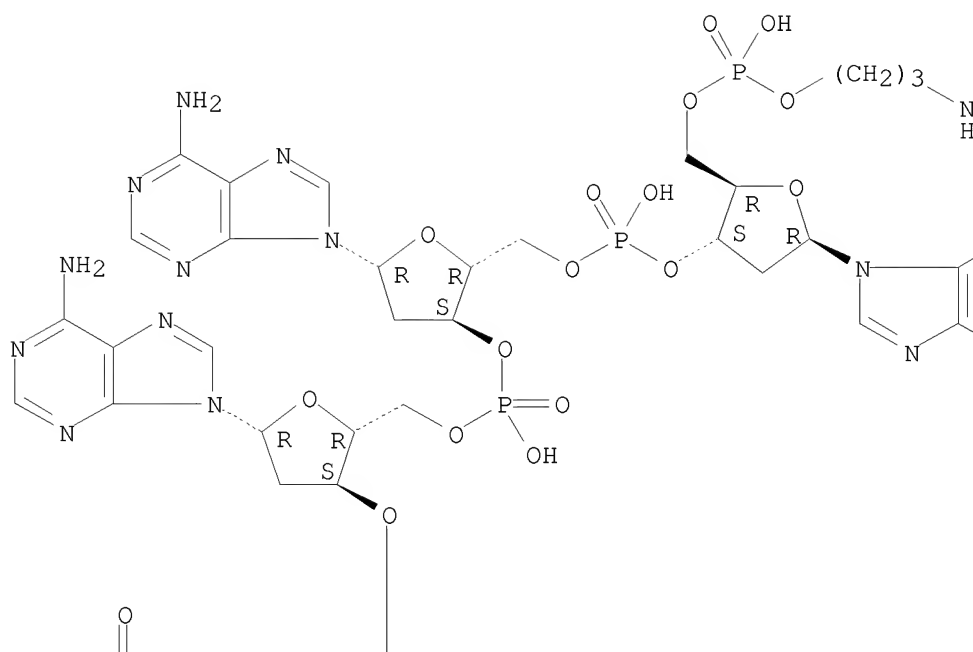
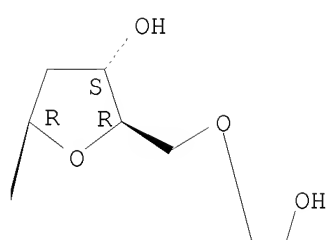




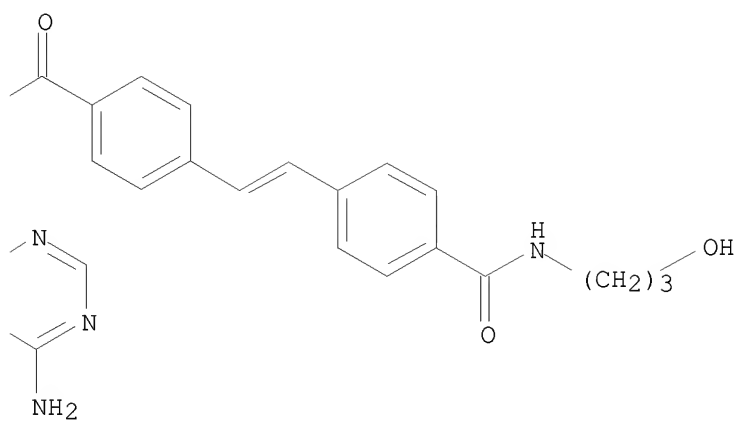
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CN	Thymidine, 2'-deoxy-5'-O-[hydroxy[3-[[4-[2-[4-[[(3-hydroxypropyl)amino]carbonyl]phenyl]ethenyl]benzoyl]amino]propoxy]phosphiny]adenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-(9CI) (CA INDEX NAME)	

Absolute stereochemistry.
Double bond geometry unknown.

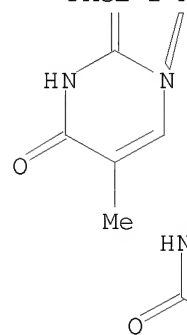


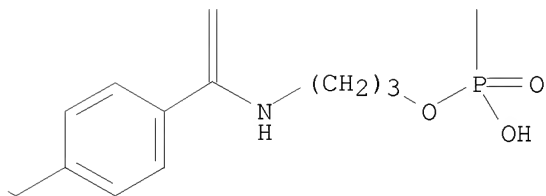
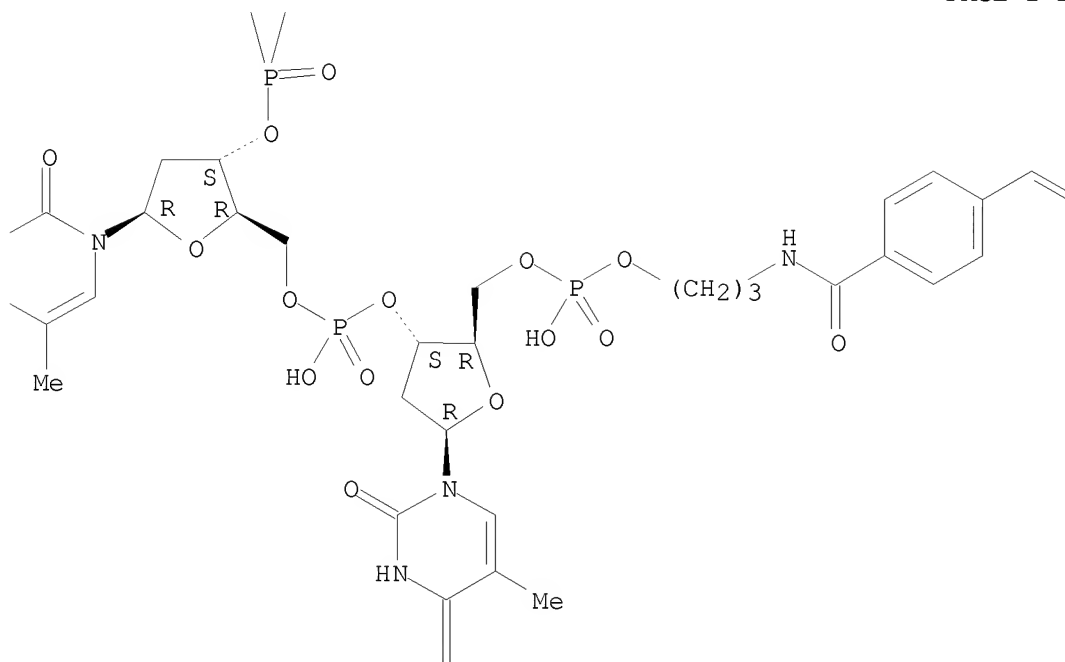


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PAGE 2-A

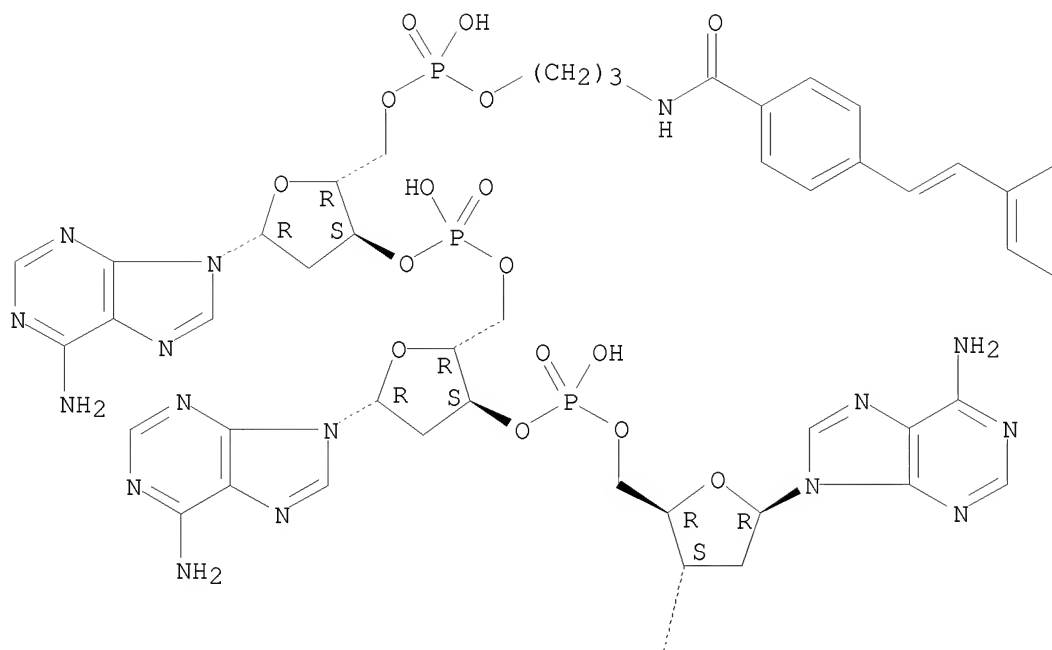




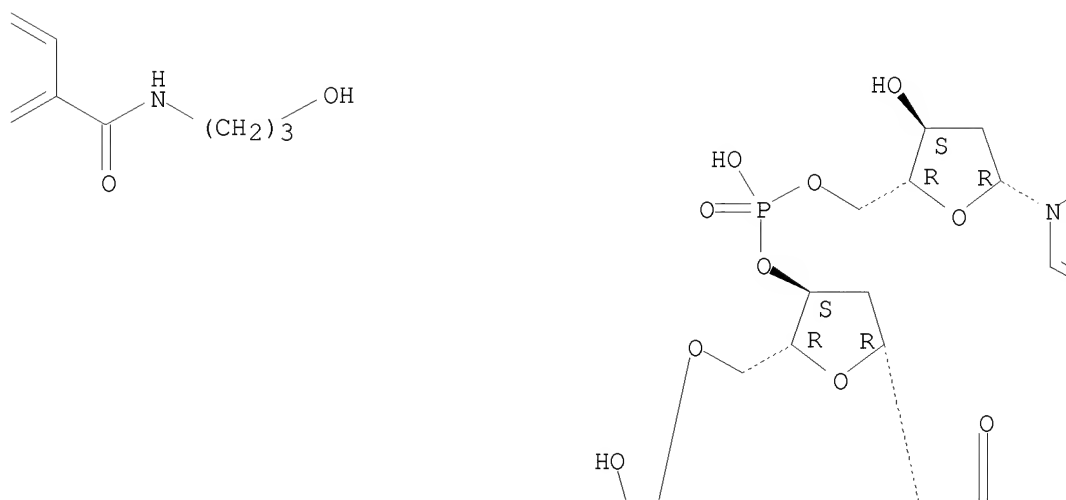
RN 625096-12-0 CAPLUS
 CN Thymidine, 2'-deoxy-5'-O-[hydroxy[3-[[4-[2-[4-[[3-hydroxypropyl)amino]carbonyl]phenyl]ethenyl]benzoyl]amino]propoxy]phosphinyl]adenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediylloxyphosphinico-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

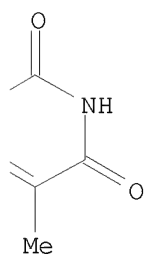
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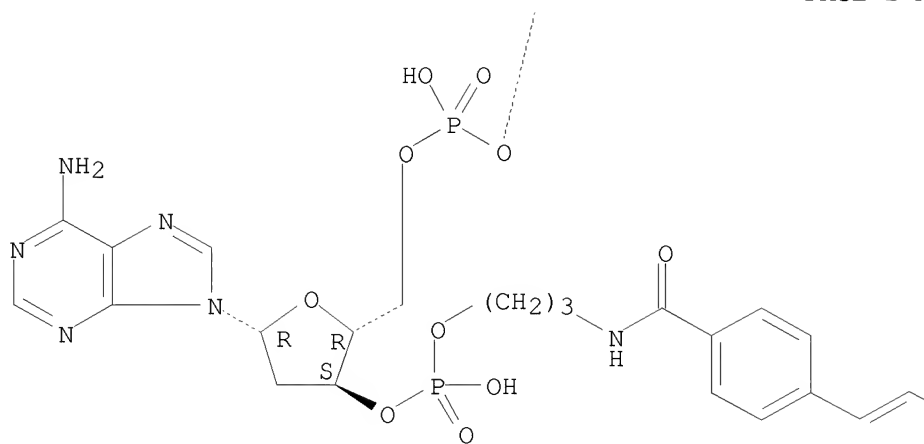
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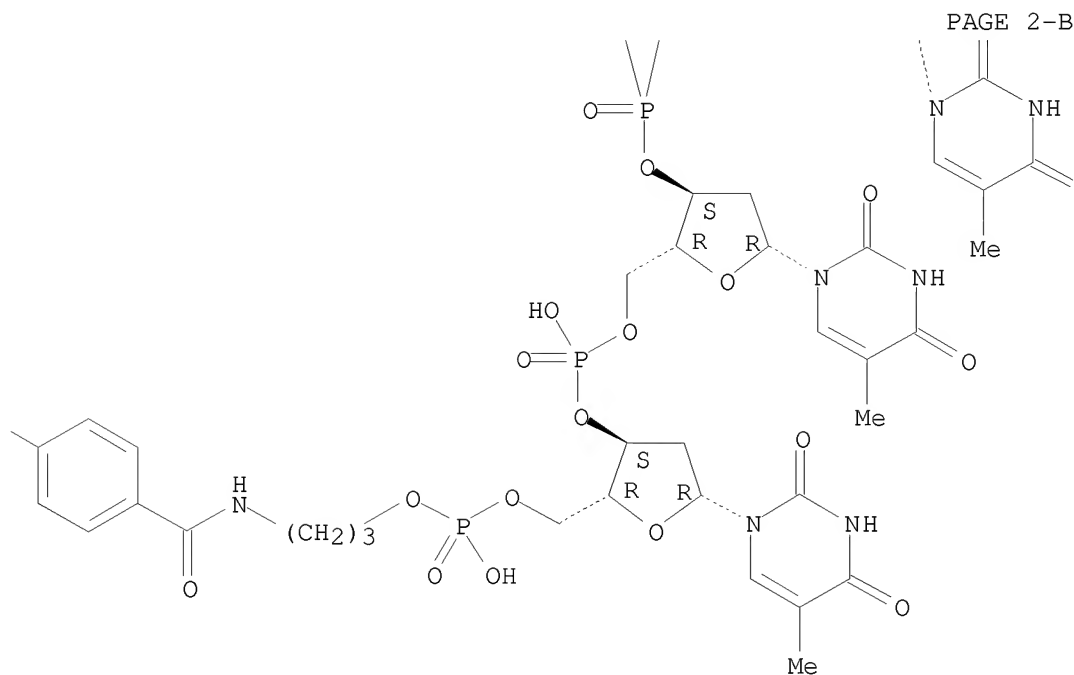


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OS.CITING REF COUNT:      33   THERE ARE 33 CAPLUS RECORDS THAT CITE THIS
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L3 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:764787 CAPLUS
DOCUMENT NUMBER: 138:12217
TITLE: Synthesis, Structure, and Photochemistry of
Exceptionally Stable Synthetic DNA Hairpins with
Stilbene Diether Linkers
AUTHOR(S): Lewis, Frederick D.; Wu, Yansheng; Liu, Xiaoyang
CORPORATE SOURCE: Department of Chemistry, Northwestern University,
Evanston, IL, 60208-3113, USA
SOURCE: Journal of the American Chemical Society (2002
, 124(41), 12165-12173
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:12217

AB The structure and properties of 18 hairpin-forming bis(oligonucleotide) conjugates possessing stilbene diether linkers are reported. Conjugates possessing bis(2-hydroxyethyl)stilbene 4,4'-diether linkers form the most

stable DNA hairpins reported to date. Hairpins with as few as two T:A base pairs or four noncanonical G:G base pairs are stable at room temperature. Increasing the length of the hydroxyalkyl groups results in a decrease in hairpin thermal stability. On the basis of the investigation of their CD spectra, all of the hairpins investigated adopt B-DNA structures, except for a hairpin with a short poly(G:C) stem which forms a Z-DNA structure. Both the strong fluorescence of the stilbene diether linkers and their trans-cis photoisomerization are totally quenched in hairpins possessing neighboring T:A and G:C base pairs. Quenching is attributed to an electron-transfer mechanism in which the singlet stilbene serves as an electron donor and T or C serves as an electron acceptor. In contrast, in denatured hairpins and hairpins possessing neighboring G:G base pairs the stilbene diether linkers undergo efficient photoisomerization.

IT 476009-51-5P

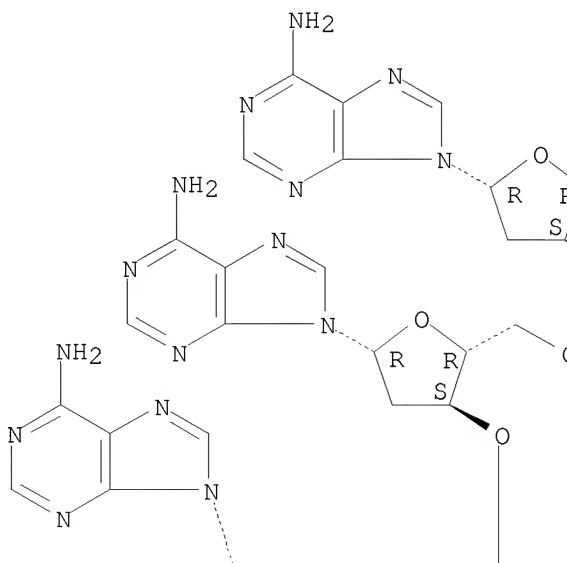
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation)
(hairpin conformation; synthesis, structure, and photochem. of
exceptionally stable synthetic DNA hairpins with stilbene diether
linkers)

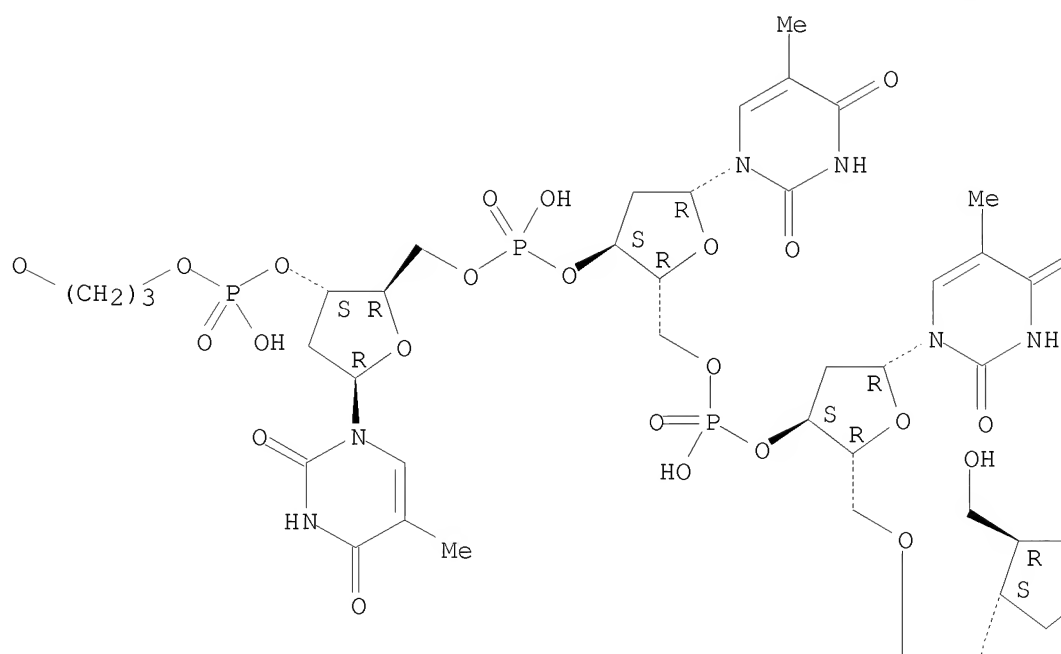
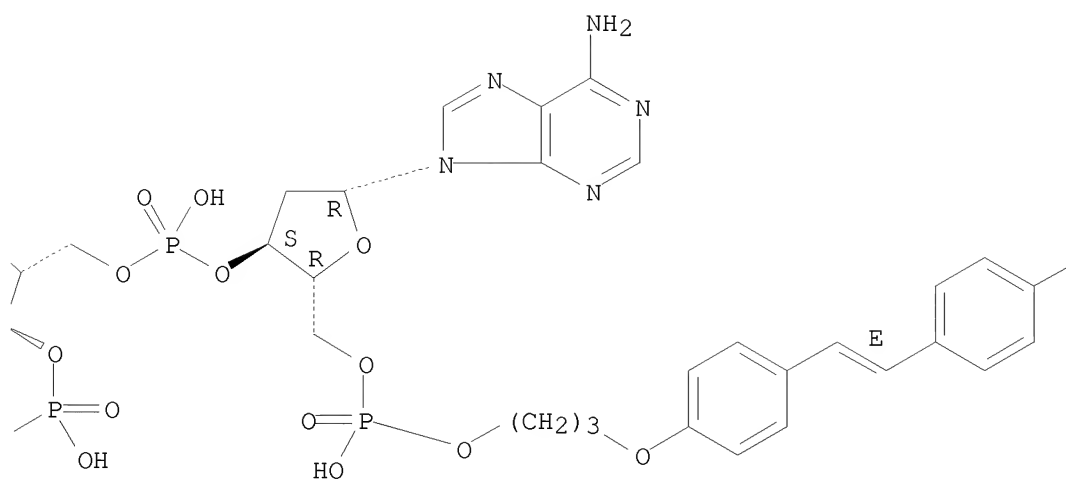
RN 476009-51-5 CAPLUS

CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-
(3'→5')-thymidylyloxy-1,3-propanediyl-1,4-phenylene-(1E)-1,2-
ethenediyl-1,4-phenyleneoxy-1,3-propanediyl-1,3-propanediyl-
phosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
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Absolute stereochemistry.
Double bond geometry as shown.

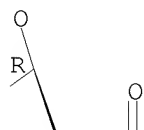
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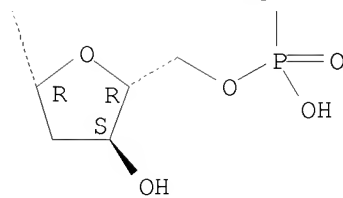


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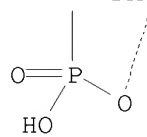
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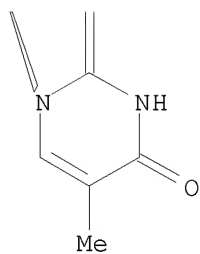
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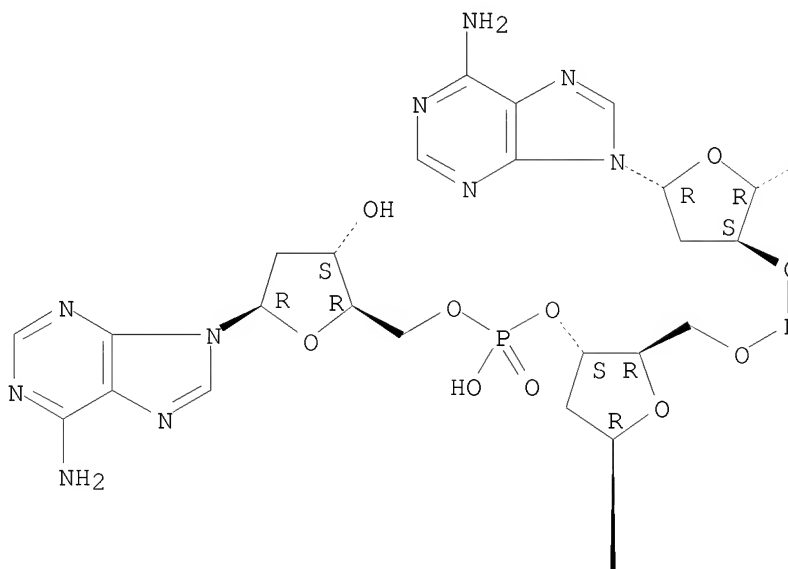
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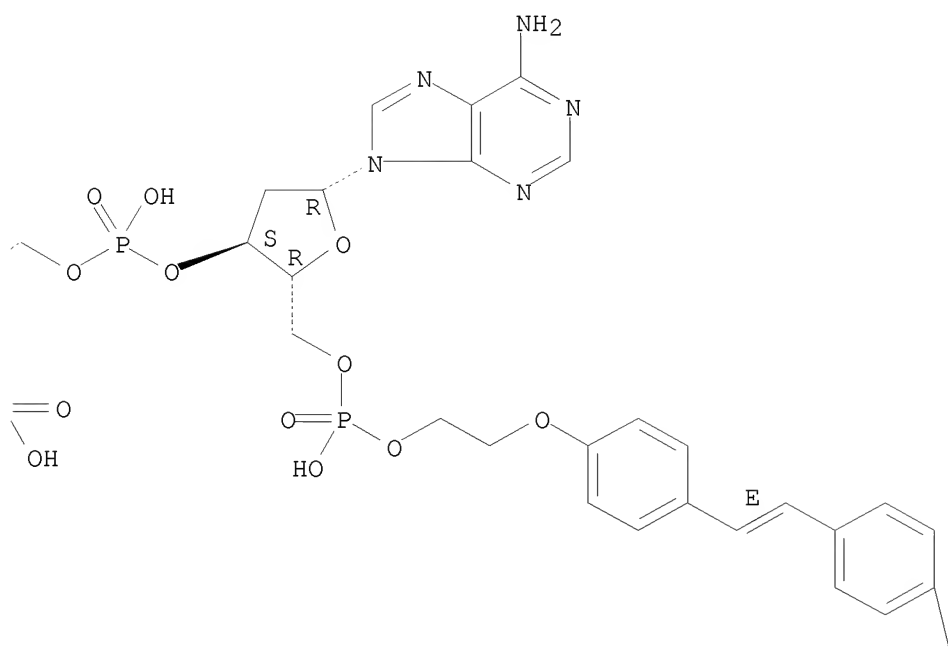
IT 256239-59-5P 476009-44-6P 476009-47-9P
 476009-53-7P
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
 BIOL (Biological study); PREP (Preparation)
 (synthesis, structure, and photochem. of exceptionally stable synthetic
 DNA hairpins with stilbene diether linkers)
 RN 256239-59-5 CAPLUS
 CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-
 (3'→5')-thymidylyloxy-1,2-ethanediyl-1,4-phenylene-(1E)-1,2-
 ethenediyl-1,4-phenyleneoxy-1,2-ethanediylphosphinico-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

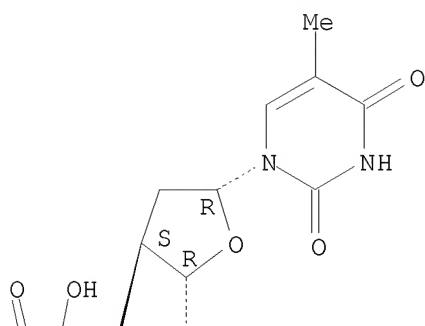
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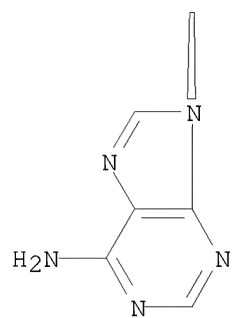
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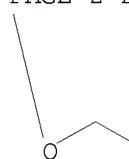
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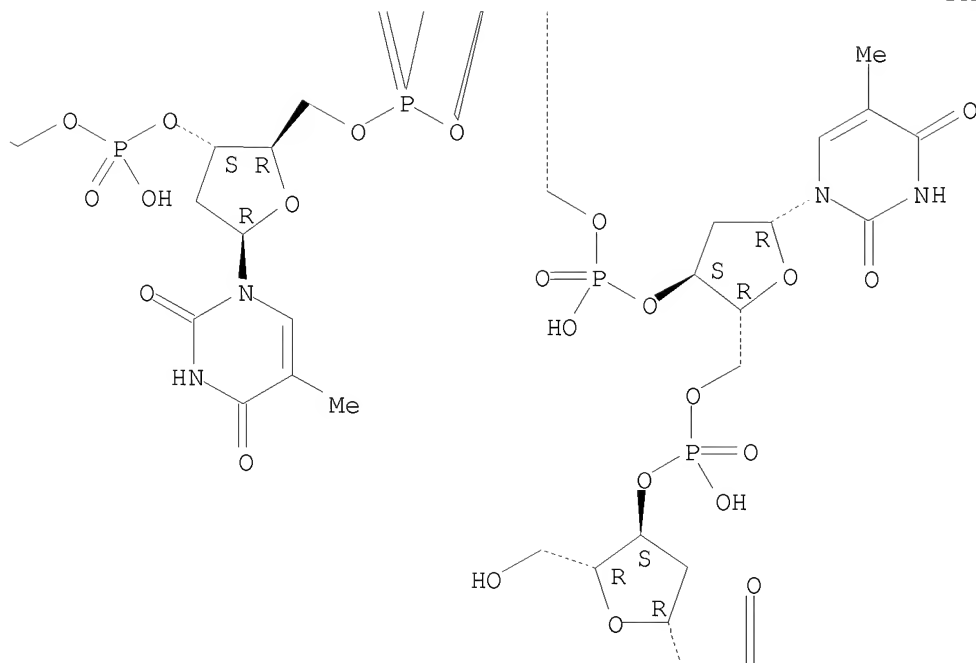
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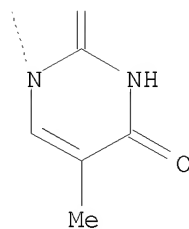


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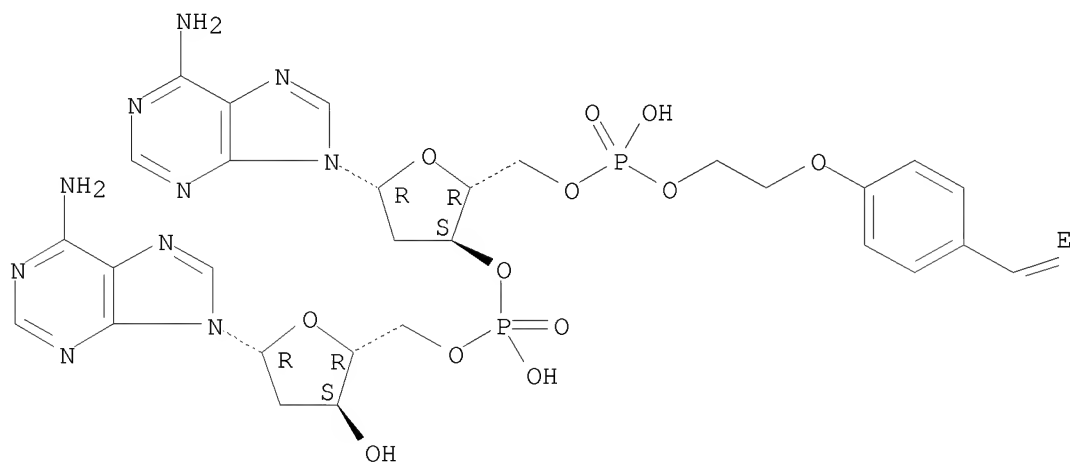


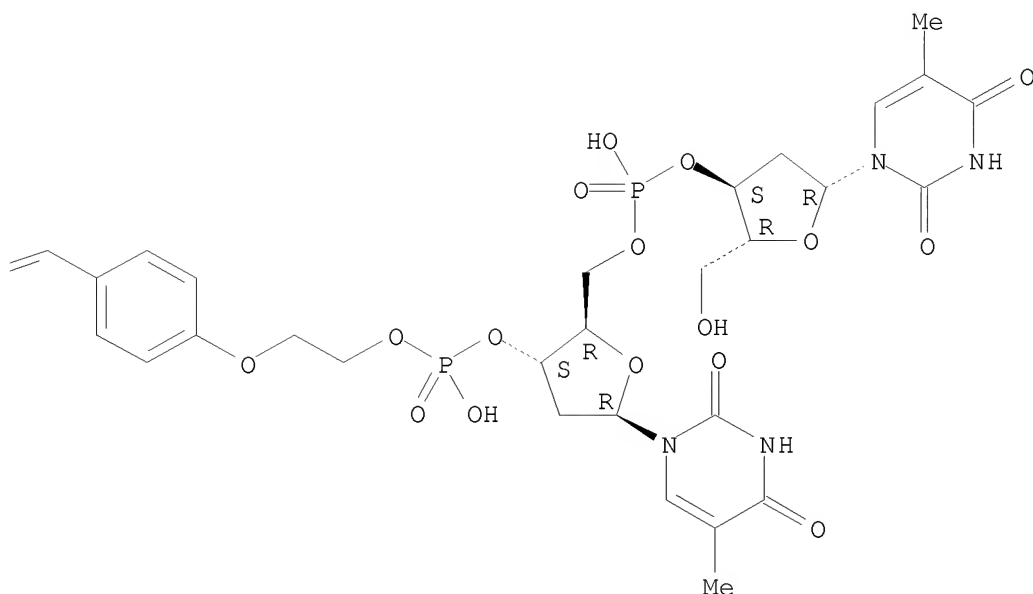


RN 476009-44-6 CAPLUS

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Absolute stereochemistry.
Double bond geometry as shown.

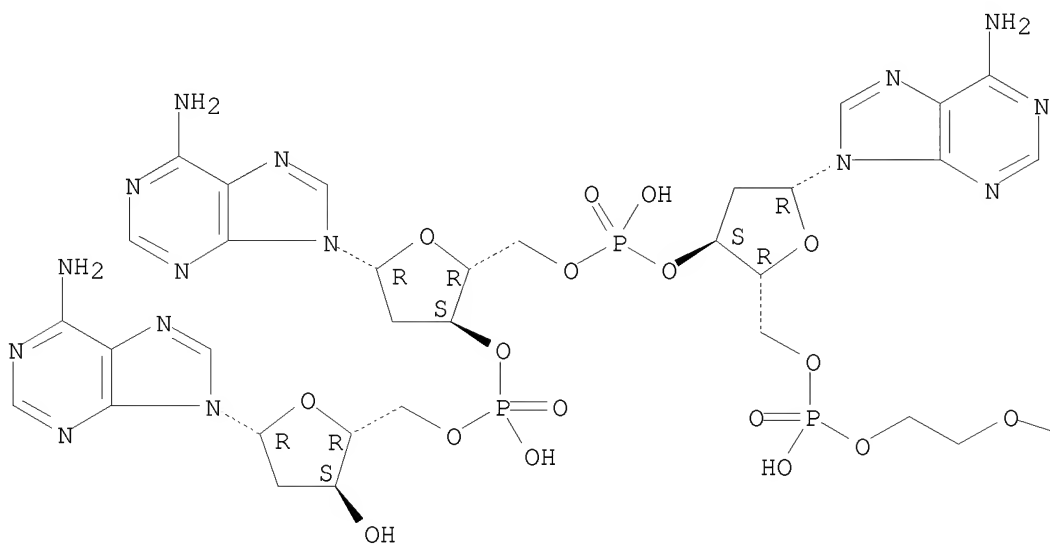




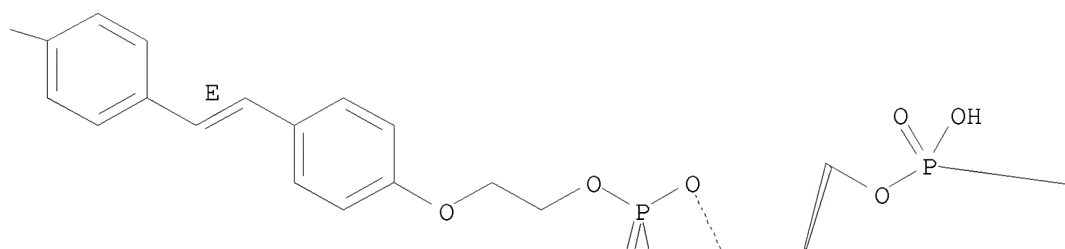
RN 476009-47-9 CAPLUS

CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyloxy-1,2-ethanediyl-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenyleneoxy-1,2-ethanediylphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

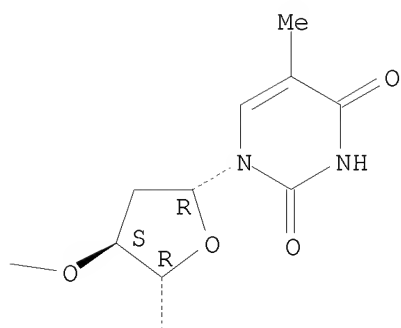
Absolute stereochemistry.
Double bond geometry as shown.



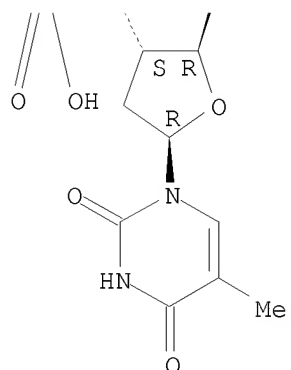
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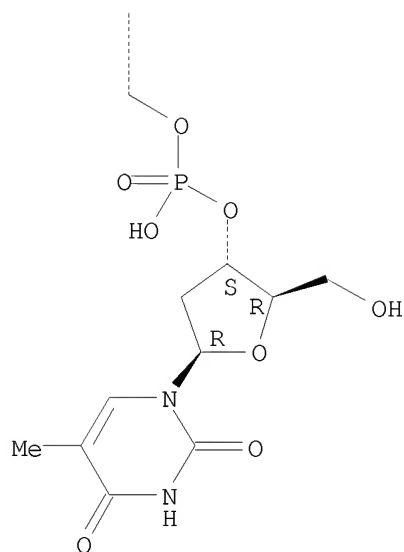
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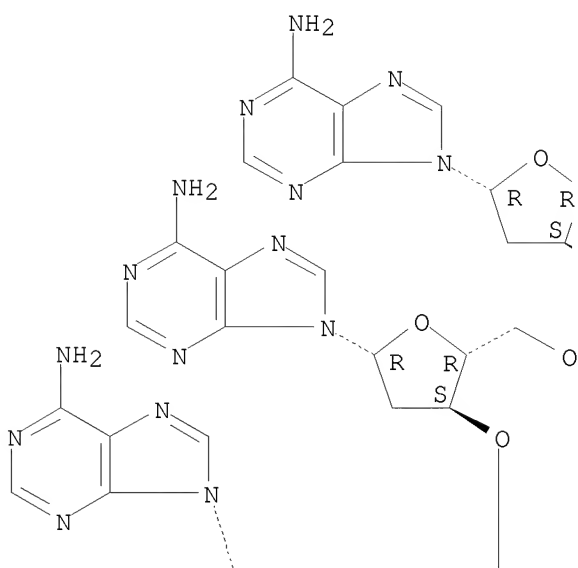


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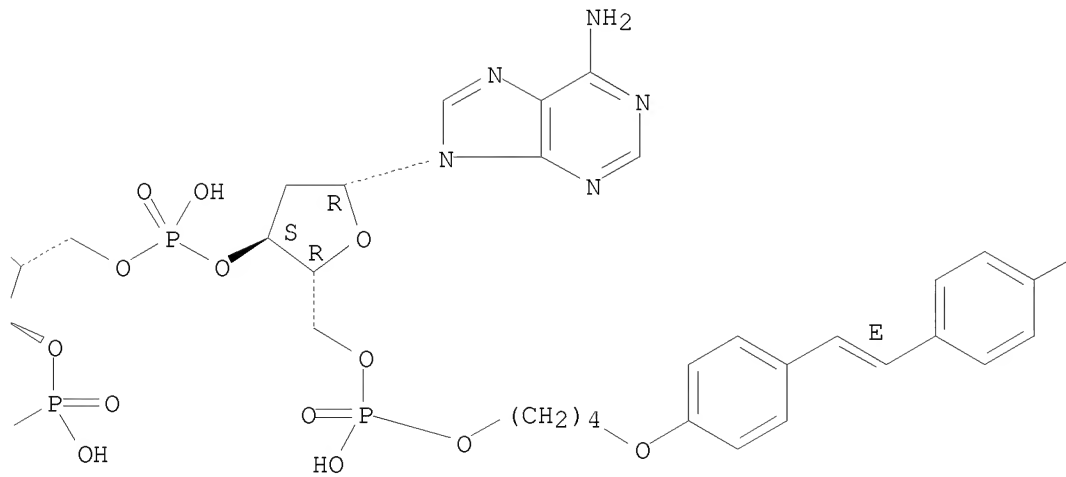
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyloxy-1,4-butanediylloxy-1,4-phenylene-(1E)-1,2-ethenediyl-1,4-phenyleneoxy-1,4-butanediylloxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

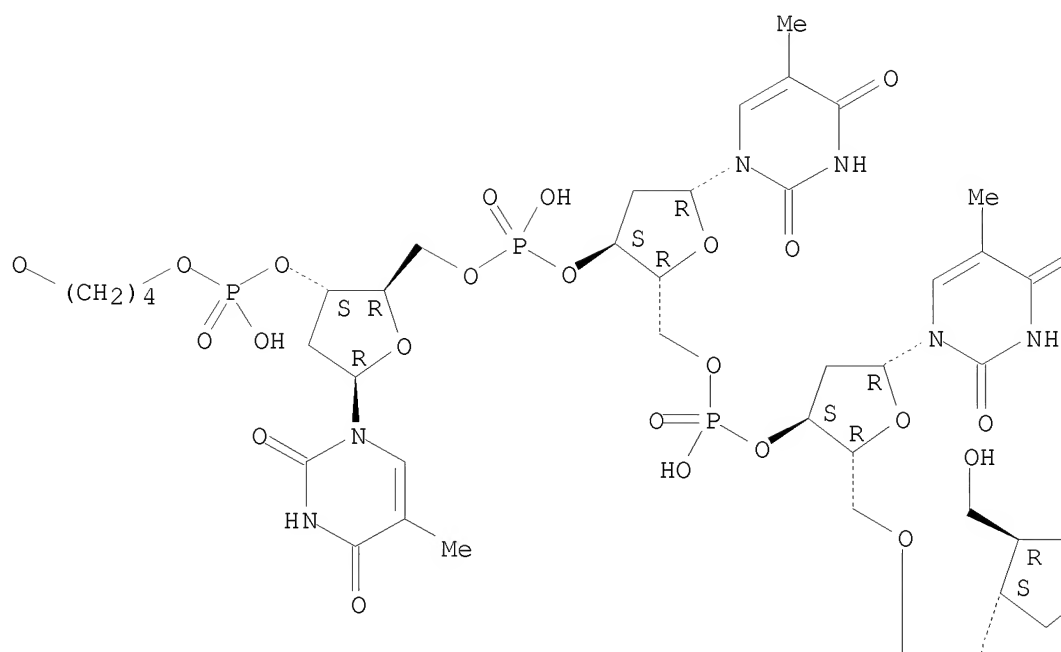
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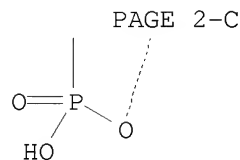
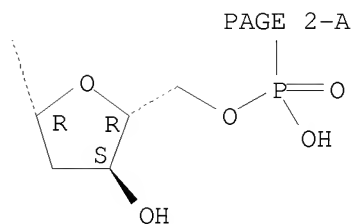
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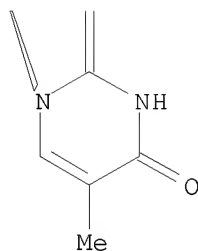
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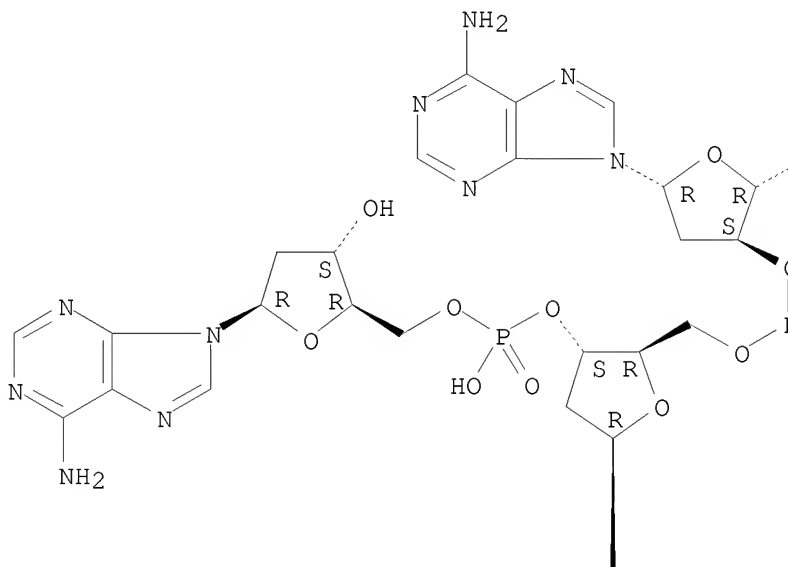
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L3 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1999:771162 CAPLUS
DOCUMENT NUMBER: 132:118899
TITLE: Phototriggered DNA Hairpin Formation in a
Stilbenediether-Linked Bis(oligonucleotide) Conjugate
AUTHOR(S): Lewis, Frederick D.; Liu, Xiaoyang
CORPORATE SOURCE: Department of Chemistry, Northwestern University,
Evanston, IL, 60208-3113, USA
SOURCE: Journal of the American Chemical Society (1999
, 121(50), 11928-11929
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors report here phototriggered DNA hairpin formation in a
stilbenediether-linked bis(oligonucleotide) conjugate.
IT 256239-59-5 256239-60-8
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP
(Properties); BIOL (Biological study); PROC (Process)
(phototriggered DNA hairpin formation in a stilbenediether-linked
bis(oligonucleotide) conjugate)
RN 256239-59-5 CAPLUS

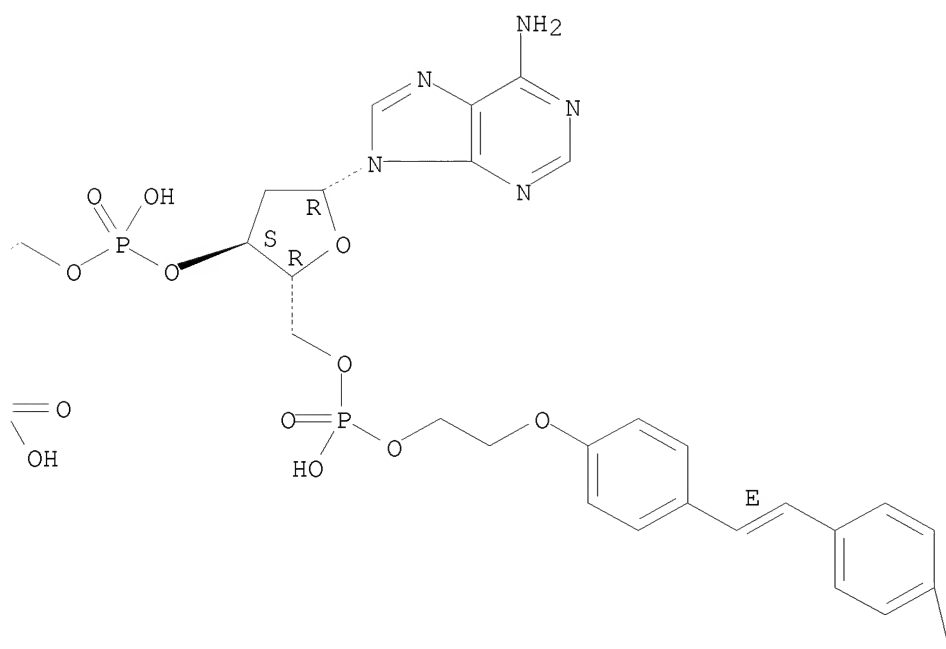
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-
 (3'→5')-thymidylyloxy-1,2-ethanediyl-1,4-phenylene-(1E)-1,2-
 ethenediyl-1,4-phenyleneoxy-1,2-ethanediylphosphinico-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

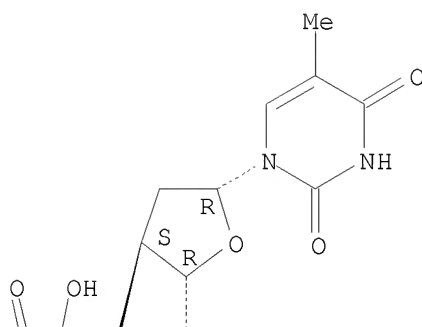
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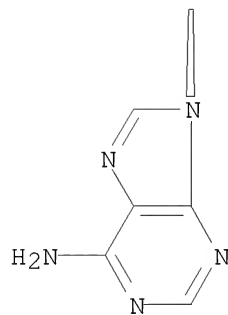
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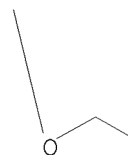
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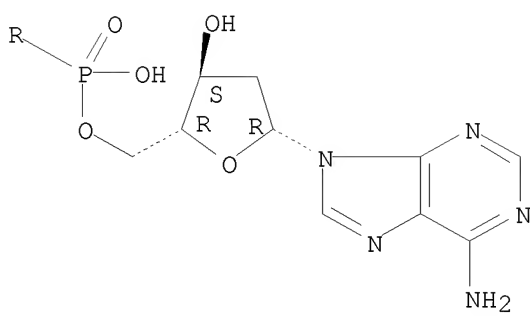
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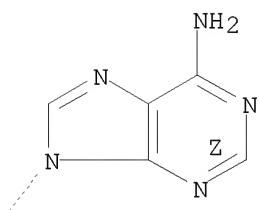
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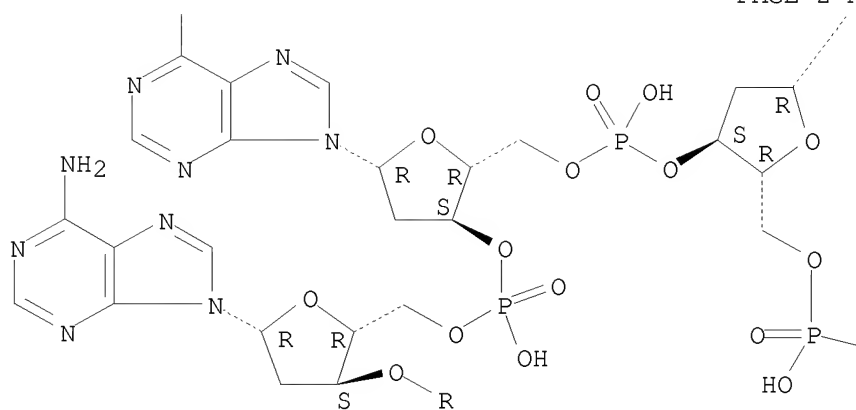
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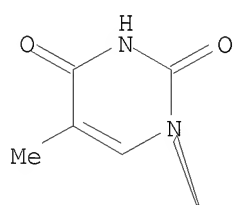
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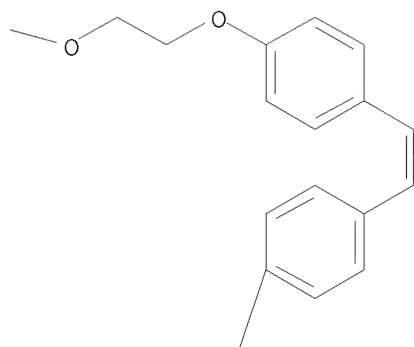
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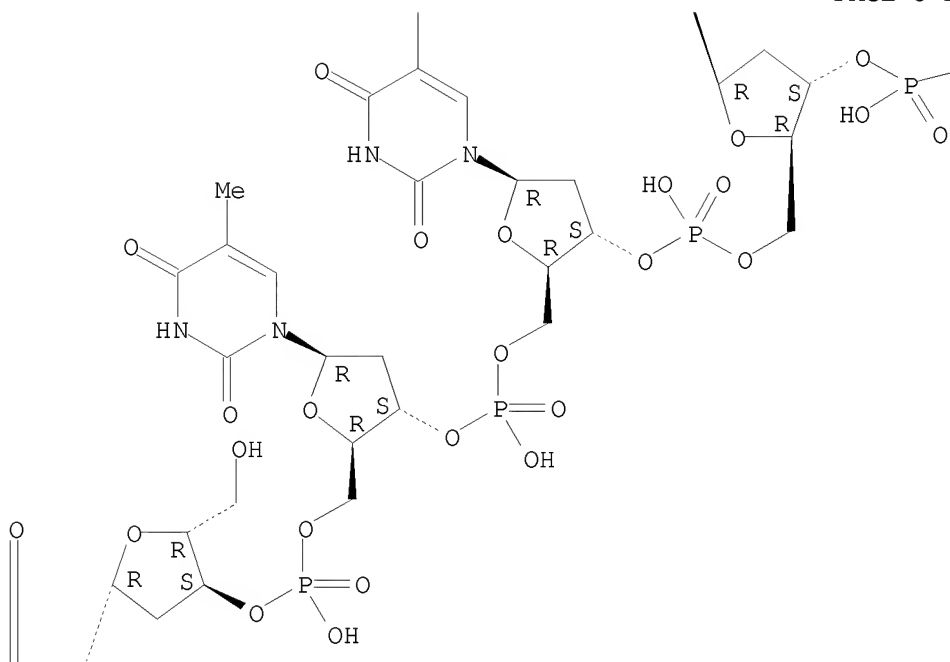
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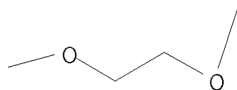
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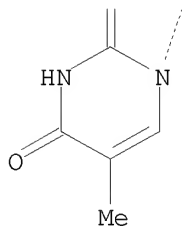
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PAGE 3-B



PAGE 4-A



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1999:649453 CAPLUS

DOCUMENT NUMBER: 132:32295

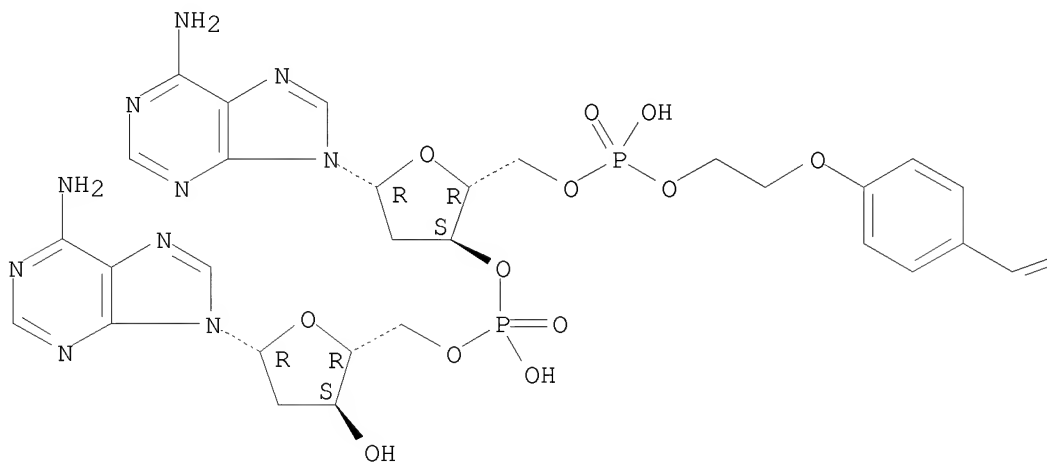
TITLE: Structure and Photoinduced Electron Transfer in Exceptionally Stable Synthetic DNA Hairpins with Stilbenediether Linkers

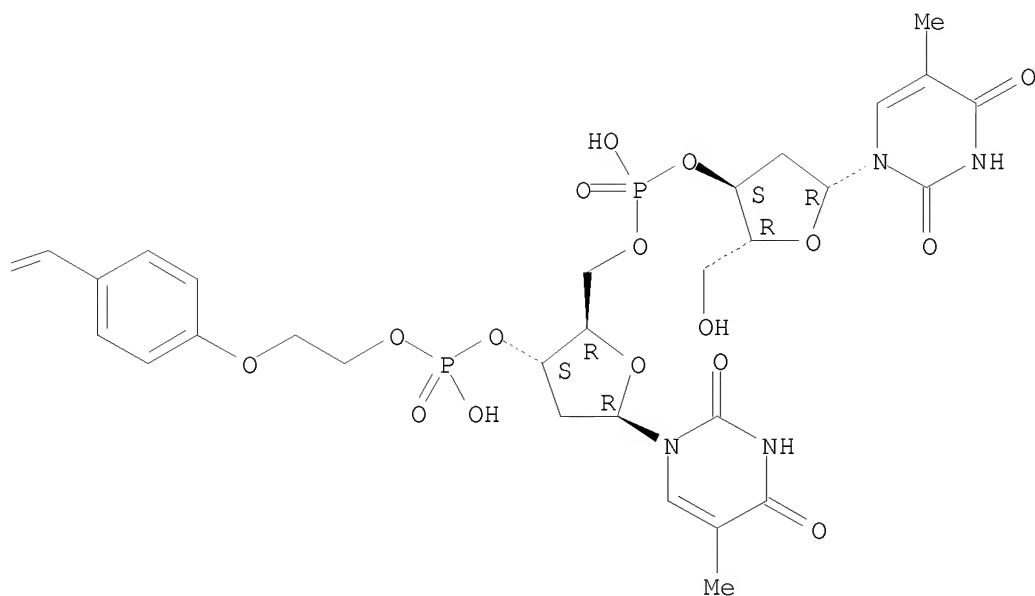
AUTHOR(S): Lewis, Frederick D.; Liu, Xiaoyang; Wu, Yangsheng; Miller, Scott E.; Wasielewski, Michael R.; Letsinger, Robert L.; Sanishvili, Ruslan; Joachimiak, Andrzej;

CORPORATE SOURCE: Tereshko, Valentina; Egli, Martin
 Department of Chemistry, Northwestern University
 Evanston, Evanston, IL, 60208-3113, USA
 SOURCE: Journal of the American Chemical Society (1999
), 121(42), 9905-9906
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 132:32295
 AB The authors report here structure and photoinduced electron transfer in
 exceptionally stable synthetic DNA hairpins with stilbenediether linkers.
 IT 252025-34-6 252025-35-7 252025-36-8
 252025-37-9 252025-38-0
 RL: BPR (Biological process); BSU (Biological study, unclassified); PRP
 (Properties); BIOL (Biological study); PROC (Process)
 (structure and photoinduced electron transfer in exceptionally stable
 synthetic DNA hairpins with stilbenediether linkers)
 RN 252025-34-6 CAPLUS
 CN Adenosine, thymidylyl-(3'→5')-thymidylyloxy-1,2-ethanediyl-1,4-
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 NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

PAGE 1-A

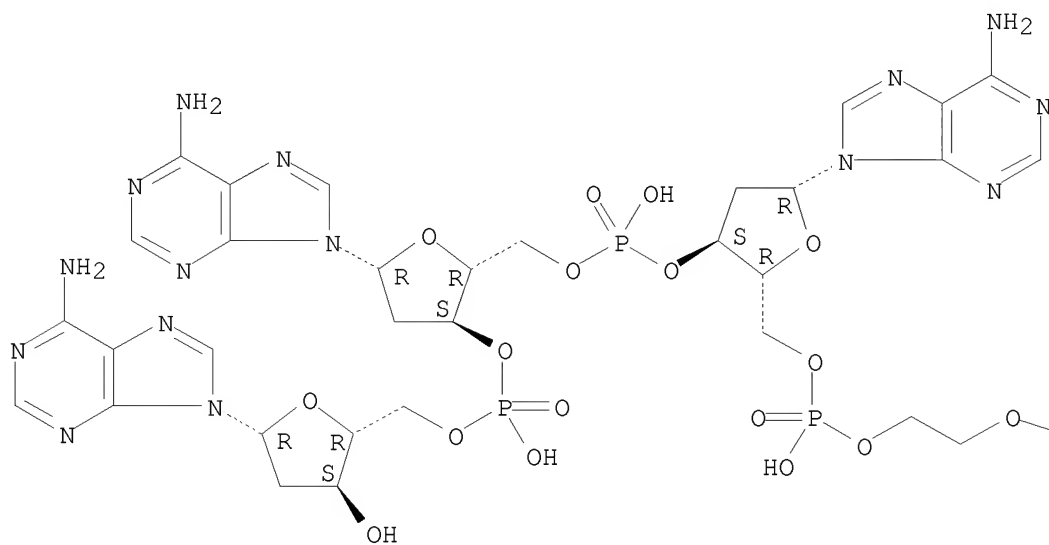




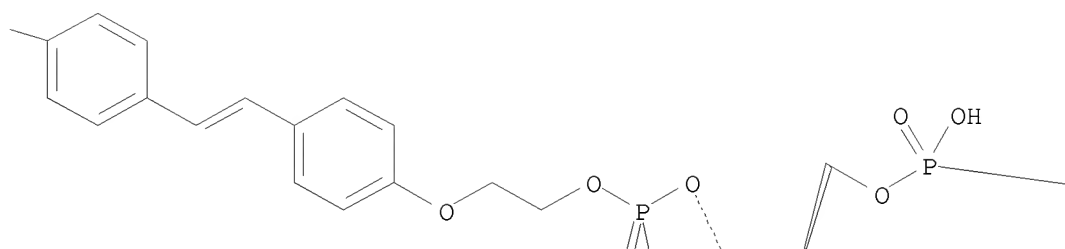
RN 252025-35-7 CAPLUS

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NAME)

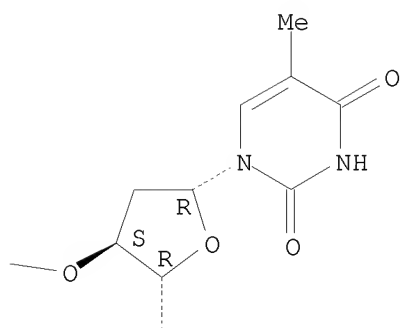
Absolute stereochemistry.
Double bond geometry unknown.



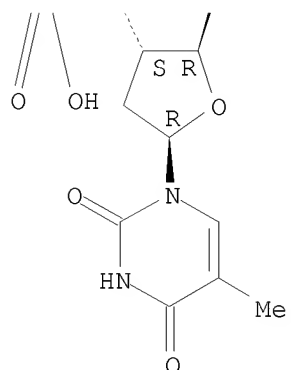
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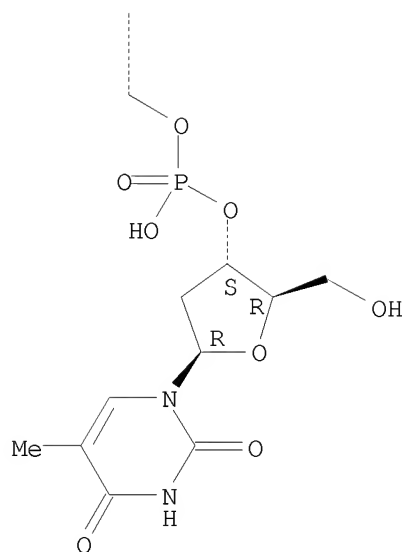
PAGE 1-C



PAGE 2-B



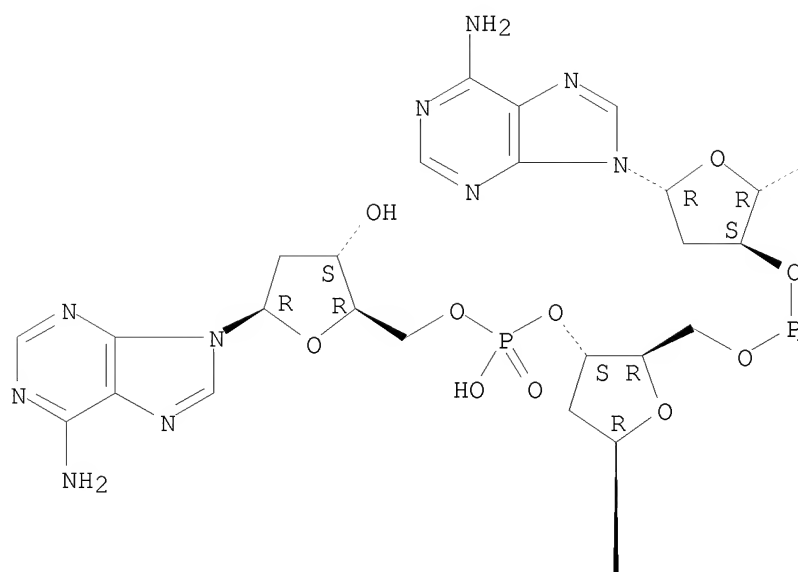
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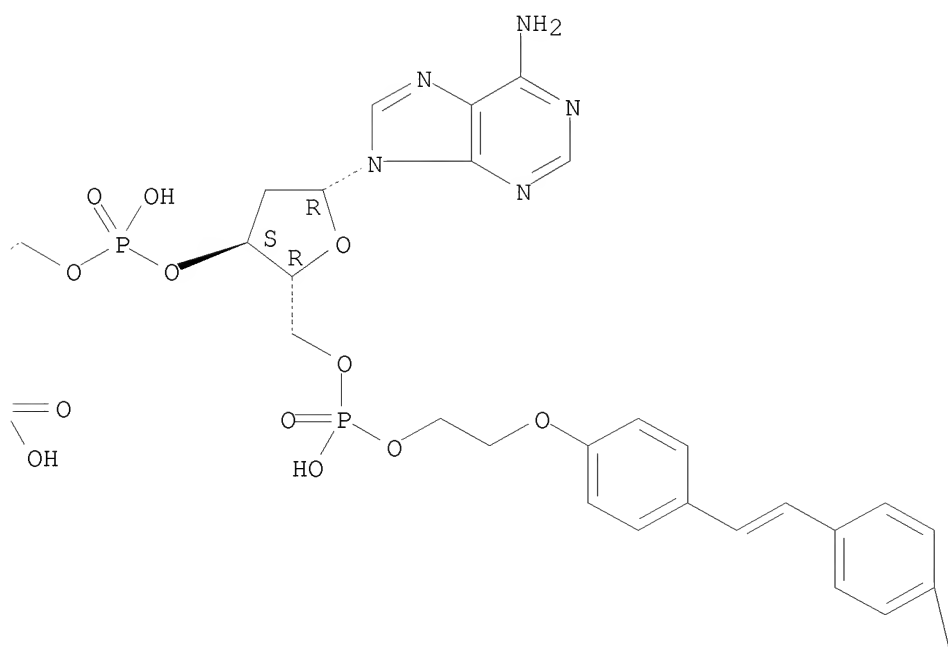
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 ethenediyl-1,4-phenyleneoxy-1,2-ethanediyl-1,2-ethanediyl-
 deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

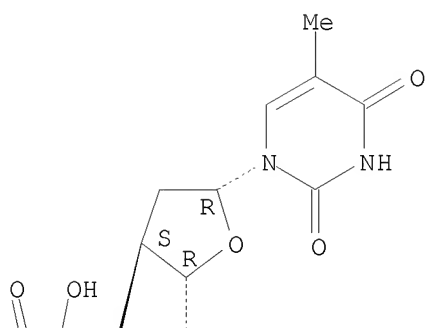
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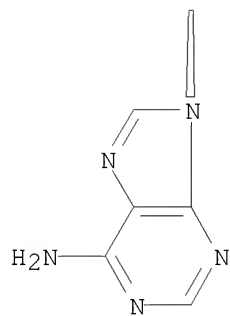
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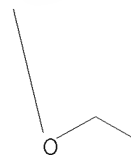
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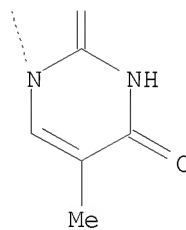
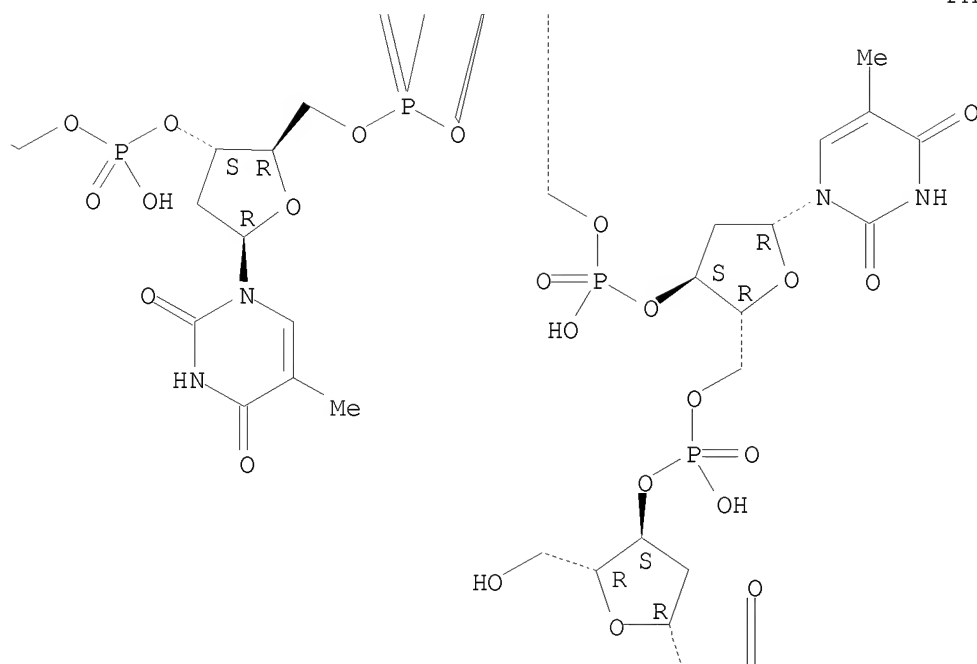


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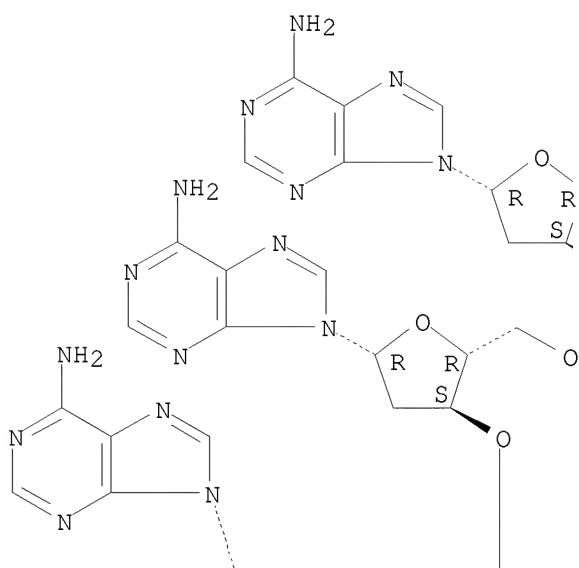
RN 252025-37-9 CAPLUS

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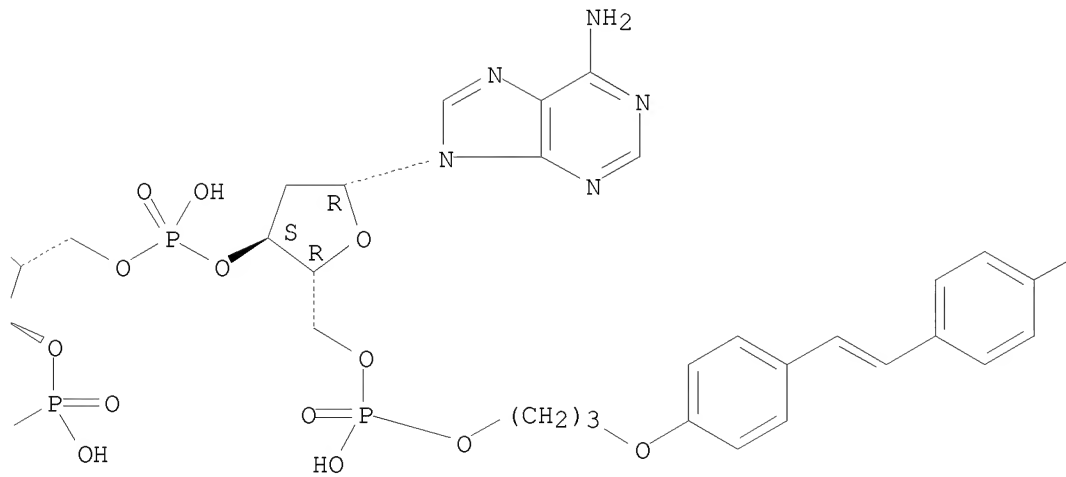
Absolute stereochemistry.

Double bond geometry unknown.

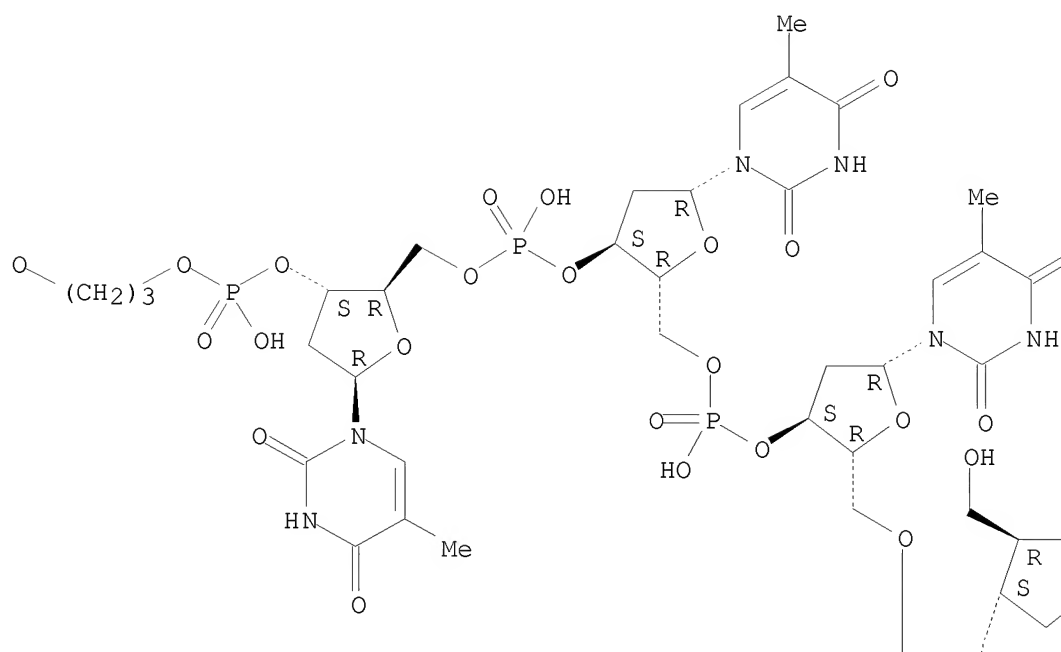
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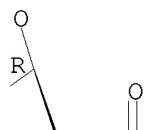


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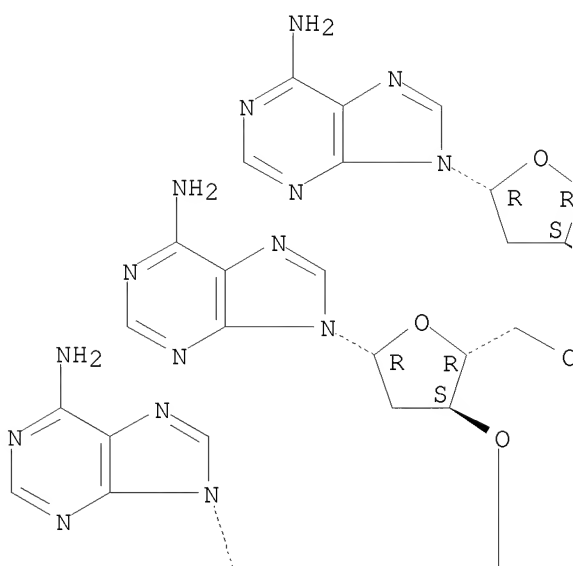


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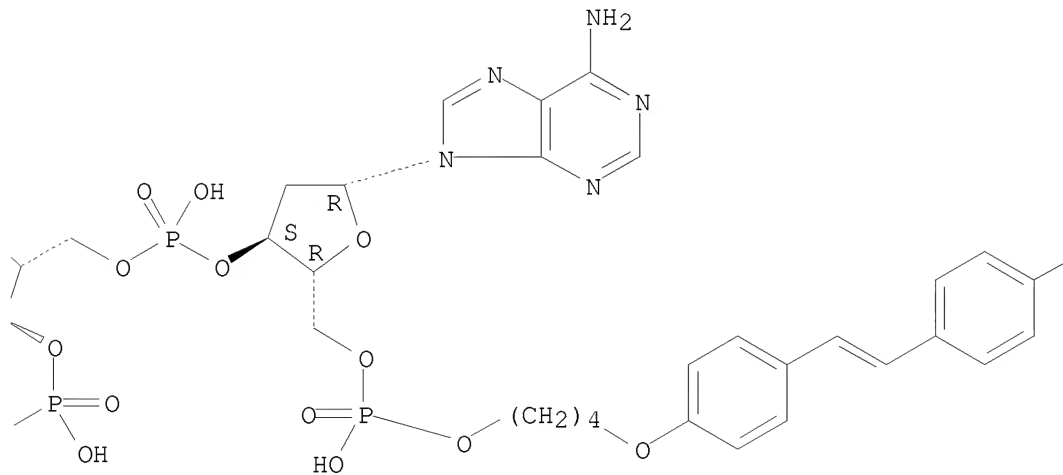
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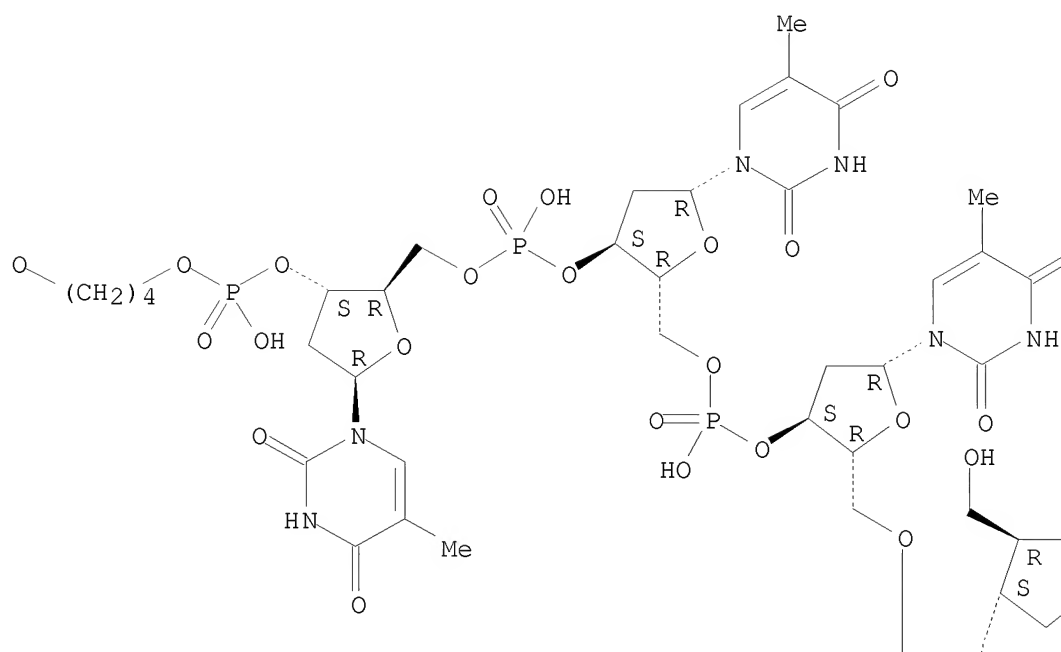
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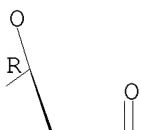


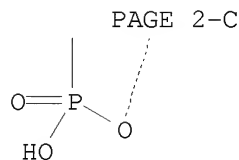
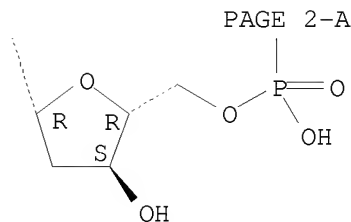
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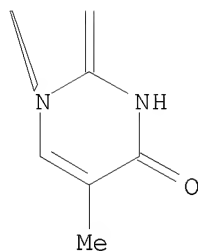
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PAGE 2-D



OS.CITING REF COUNT: 95 THERE ARE 95 CAPLUS RECORDS THAT CITE THIS RECORD (95 CITINGS)
 REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1998:667137 CAPLUS
 DOCUMENT NUMBER: 130:62505
 TITLE: Use of oligonucleotide conjugates in creating self-assembling supramolecular systems
 AUTHOR(S): Letsinger, Robert L.
 CORPORATE SOURCE: Department of Chemistry, Northwestern University, Evanston, IL, 60208, USA
 SOURCE: Nucleosides & Nucleotides (1998), 17(9-11), 1861-1869
 CODEN: NUNUD5; ISSN: 0732-8311
 PUBLISHER: Marcel Dekker, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The chemical of two types of oligonucleotide conjugates containing novel chromophores are described. One, containing a stilbenedicarboxamide bridge, generates unusually stable hairpin structures that are useful in assessing rates of electron transfer through the π system of a DNA double helix. The other, containing gold nanoparticle conjugates, provides a highly selective system for detecting nucleotide sequences in oligonucleotides.

IT 217305-09-4 217305-11-8
 RL: PRP (Properties)

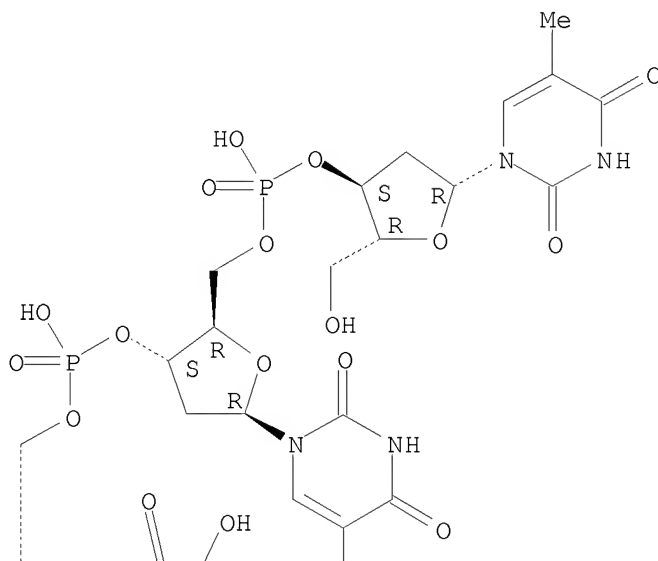
(melting temperature; use of oligonucleotide conjugates in creating self-assembling supramol. systems for application in assessing electron transfer rates through duplex DNA and nucleotide sequence anal.)

RN 217305-09-4 CAPLUS

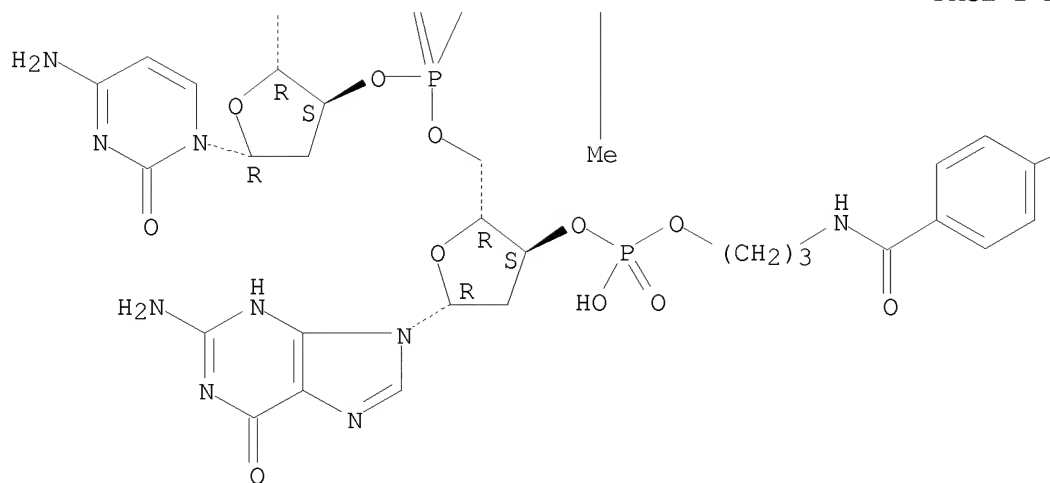
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-deoxyguanylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→3')-2'-deoxycytidylyl-(5'→3')-2'-deoxyguanylyl-(5'→3')-2'-deoxyadenylyl-(5'→3')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

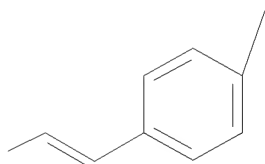
PAGE 1-A



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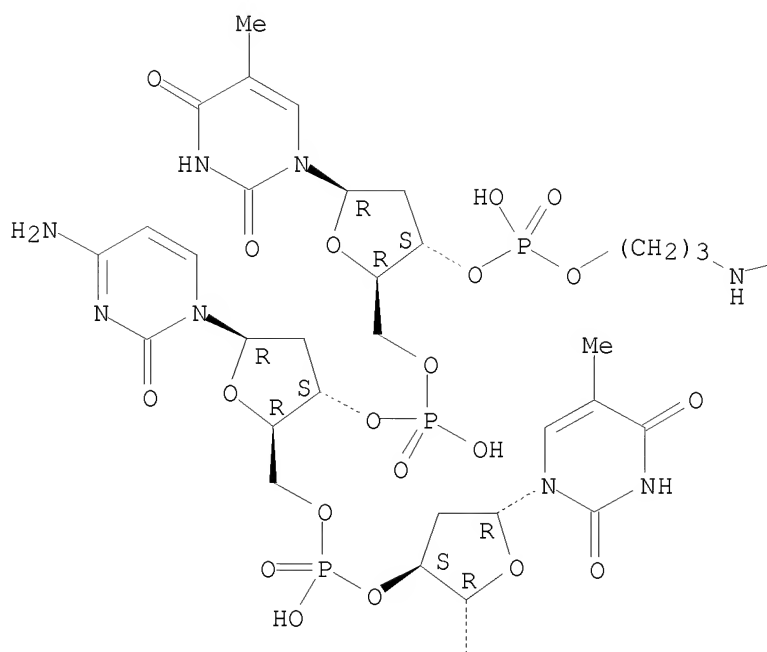
PAGE 2-B



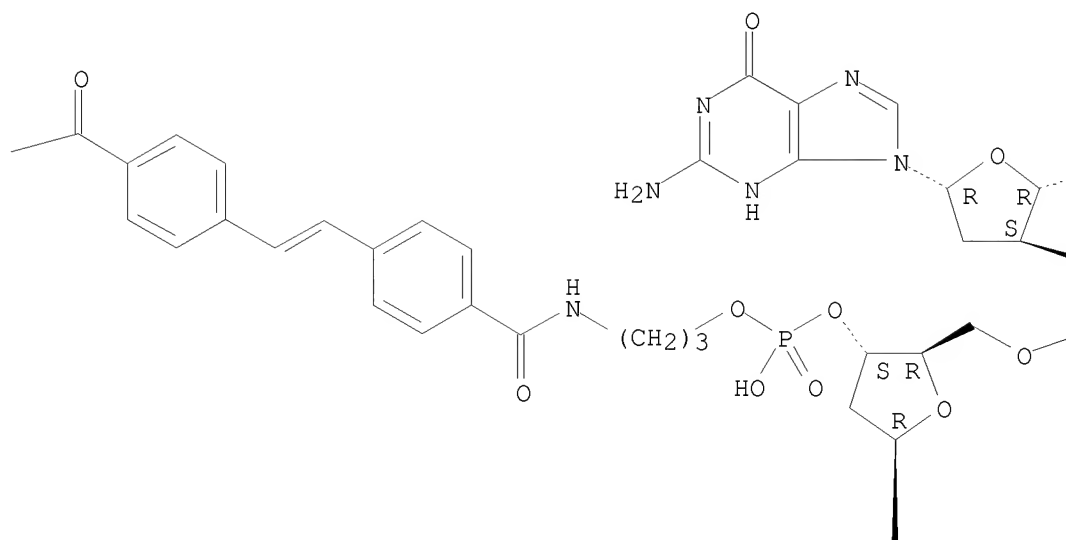
RN 217305-11-8 CAPLUS
 CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
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 1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-
 propanediylloxyphosphinico-(3'→3')-2'-deoxyadenylyl-(5'→3')-
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 (9CI) (CA INDEX NAME)

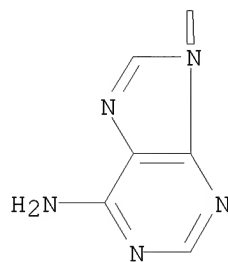
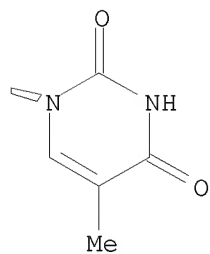
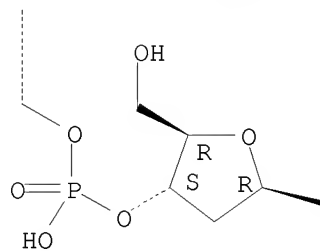
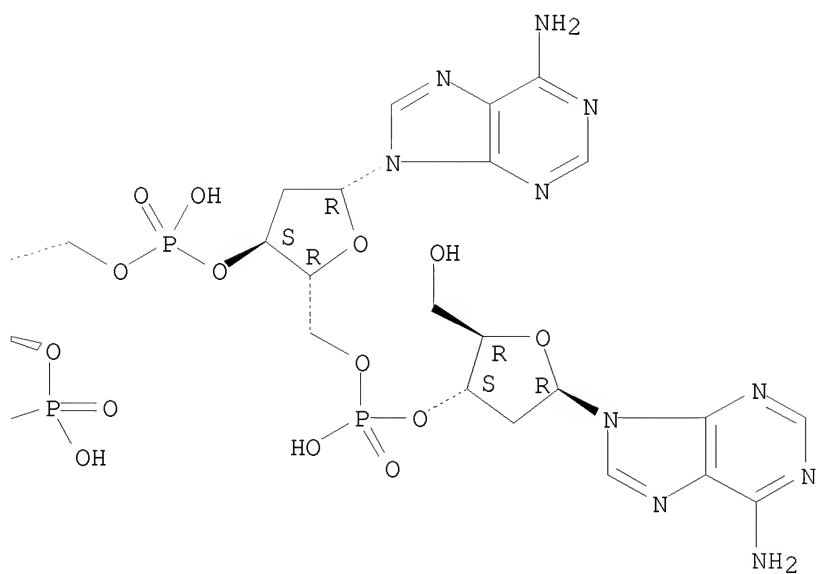
Absolute stereochemistry.
 Double bond geometry unknown.

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PAGE 1-B





OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT:	13	THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1998:240161 CAPLUS

DOCUMENT NUMBER: 128:225806

ORIGINAL REFERENCE NO.: 128:44577a,44580a

TITLE: Synthesis and DNA reactivity of α -hydroxylated metabolites of nonsteroidal antiestrogens

AUTHOR(S): Hardcastle, Ian R.; Horton, Martin N.; Osborne, Martin R.; Hewer, Alan; Jarman, Michael; Phillips, David H.

CORPORATE SOURCE: Institute of Cancer Research, CRC Centre for Cancer Therapeutics and Section of Molecular Carcinogenesis, Sutton/Surrey, UK

SOURCE: Chemical Research in Toxicology (1998), 11(4), 369-374

CODEN: CRTOEC; ISSN: 0893-228X

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Tamoxifen [(E)-1-(4-(2-(N,N-dimethylamino)ethoxy)phenyl)-1,2-diphenylbut-1-ene], a nonsteroidal antiestrogen, induces liver tumors in rats by a genotoxic mechanism. The mechanism of DNA adduct formation is believed to proceed via the formation of a reactive carbocation at the α -position from the α -hydroxylated metabolite. Mol. mechanics calcns. (H. Kuramochi 1996) have predicted that 4-substitution will affect the stability of the carbocation and thus will alter its reactivity toward DNA. The authors have synthesized the putative α -hydroxylated metabolites of 4-hydroxytamoxifen [(E)-1-(4-(2-(N,N-dimethylamino)ethoxy)phenyl)-1-(4-hydroxyphenyl)-3-hydroxy-2-phenylbut-1-ene] and idoxifene [(Z)-1-(4-iodophenyl)-3-hydroxy-2-phenyl-1-(4-(2-(N-pyrrolidino)ethoxy)phenyl)but-1-ene] and compared their reactivities with DNA with that of α -hydroxytamoxifen [(E)-1-(4-(2-(N,N-dimethylamino)ethoxy)phenyl)-3-hydroxy-1,2-diphenylbut-1-ene]. As predicted, the bis-hydroxylated compound reacted with DNA in aqueous solution at pH 5 to give 12-fold greater levels of adducts than α -hydroxytamoxifen, whereas α -hydroxyidoxifene gave one-half the number of adducts. The results demonstrate that idoxifene presents a significantly lower genotoxic hazard than tamoxifen for the treatment and prophylaxis of breast cancer.

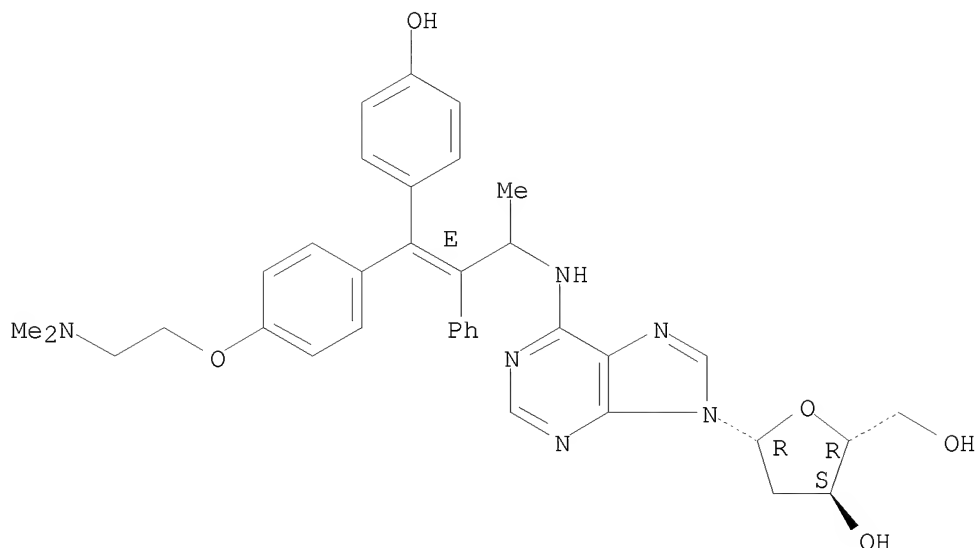
IT 204717-98-6 204717-99-7
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(preparation and DNA reactivity of α -hydroxylated metabolites of nonsteroidal antiestrogens idoxifene and tamoxifen in relation to genotoxic hazard)

RN 204717-98-6 CAPLUS

CN Adenosine, 2'-deoxy-N-[(2E)-3-[4-[2-(dimethylamino)ethoxy]phenyl]-3-(4-hydroxyphenyl)-1-methyl-2-phenyl-2-propenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

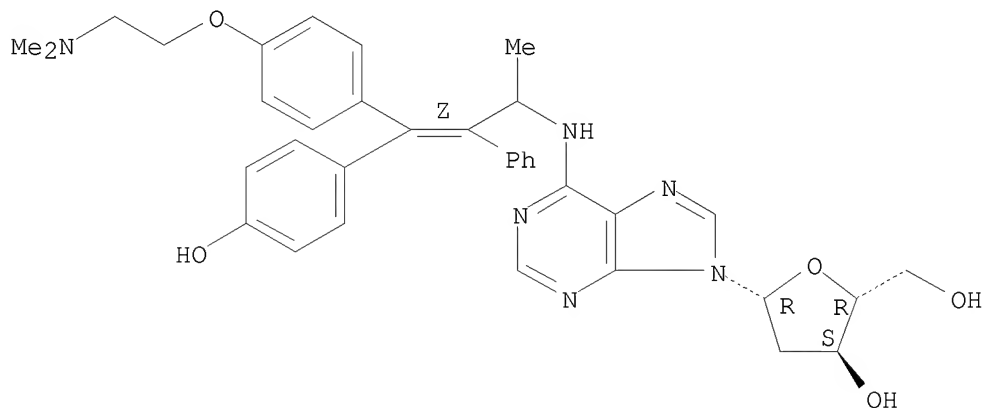
Double bond geometry as shown.



RN 204717-99-7 CAPLUS

CN Adenosine, 2'-deoxy-N-[(2Z)-3-[4-[2-(dimethylamino)ethoxy]phenyl]-3-(4-hydroxyphenyl)-1-methyl-2-phenyl-2-propenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1998:112237 CAPLUS

DOCUMENT NUMBER: 128:192493

ORIGINAL REFERENCE NO.: 128:38030h,38031a

TITLE: Preparation of purine inhibitors of cyclin dependent kinase 2 and IκB-α kinase for use as antitumor, antiproliferative, and leukemia inhibiting agents

INVENTOR(S): Lum, Robert T.; Blum, Cheri Lynn; Mackman, Richard; Wick, Michael M.; Schow, Steven R.

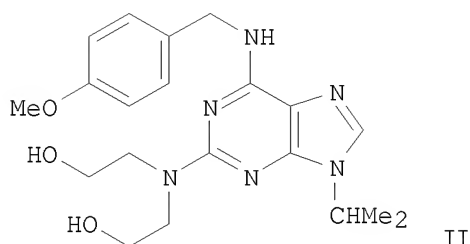
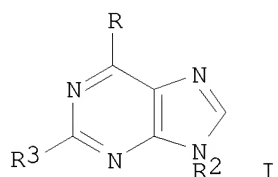
PATENT ASSIGNEE(S): Cv Therapeutics, Inc., USA; Lum, Robert T.; Blum, Cheri Lynn; Mackman, Richard; Wick, Michael M.; Schow,

SOURCE: Steven R.
PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

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WO 9805335	A1	19980212	WO 1997-US13386	19970801 <--
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RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
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CN 1161356	C	20040811		
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US 20020035252	A1	20020321	US 2001-929772	20010814 <--
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PRIORITY APPLN. INFO.:
US 1996-692012 A2 19960802
WO 1997-US13386 W 19970801
US 1999-241224 A 19990201
US 1999-230829 A1 19990830
US 1999-421244 B1 19991020
US 2001-929772 A1 20010814

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 128:192493
GI



AB A 2,6,9-trisubstituted purines I [R = halogen, XR₁; X = NH, O, S, SO₂; R₁ = alkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl; R₂ = H, alkyl, cycloalkyl, aryl, heteroaryl; R₃ = halogen, OH, SH, alkoxy, alkylthio, amino, N bonded heterocyclyl] were prepared for use inhibiting cell proliferative disorders and as antifungal agents. Thus, purine II was prepared starting from 2,6-dichloropurine, 4-methoxybenzylamine, 2-iodopropane, and (HOCH₂CH₂)₂NH. The prepared purines were tested for cell proliferation in rat aortic smooth muscle cells and for cyclin dependent kinase 2 and IκB-α kinase inhibitory activity.

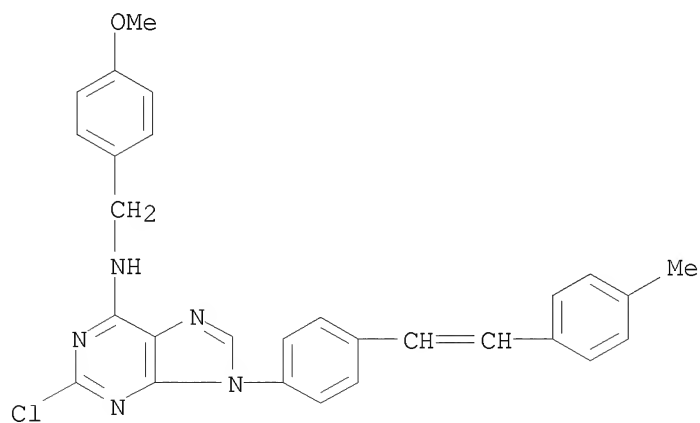
IT 1101699-09-5 1101699-12-0

RL: PRPH (Prophetic)

(Preparation of purine inhibitors of cyclin dependent kinase 2 and IκB-α kinase for use as antitumor, antiproliferative, and leukemia inhibiting agents)

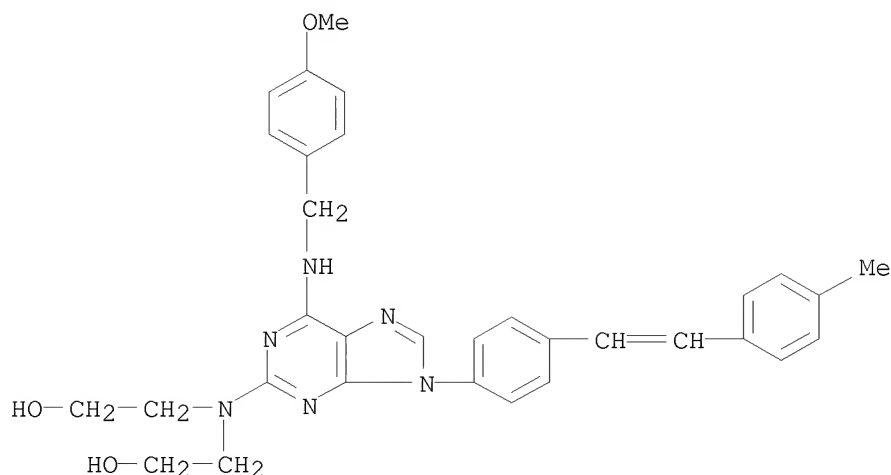
RN 1101699-09-5 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



RN 1101699-12-0 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



OS.CITING REF COUNT: 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS
RECORD (38 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1997:591274 CAPLUS

DOCUMENT NUMBER: 127:315856

ORIGINAL REFERENCE NO.: 127:61753a,61756a

TITLE: Chemical and photochemical ligation of oligonucleotide
blocks

AUTHOR(S): Letsinger, Robert L.; Wu, Taifeng; Elghanian, Robert

CORPORATE SOURCE: Dep. Chem., Northwestern Univ., Evanston, IL, 60091,
USA

SOURCE: Nucleosides & Nucleotides (1997), 16(5 & 6),
643-652

CODEN: NUNUD5; ISSN: 0732-8311

PUBLISHER: Dekker

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Several efficient means for joining oligonucleotides in dilute solution by
non-natural internucleotide bridges are discussed. It is also shown that
an oligonucleotide containing a -OP(O)(O-)S- link can function as an effective
template in PCR amplification and that oligonucleotide probes containing
stilbenedicarboxamide groups can serve in monitoring the presence of
mismatched bases in an oligonucleotide target.

IT 197664-06-5 197664-07-6 197664-08-7

197732-86-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(chemical and photochem. ligation of oligonucleotide blocks)

RN 197664-06-5 CAPLUS

CN DNA, d(C-A-G-C-T-T-G-A-C-G-A-C-T-T-A-G), complex with

5'-O-[hydroxy[3-[[4-[2-[4-[[3-
hydroxypropyl]amino]carbonyl]phenyl]ethenyl]benzoyl]amino]propoxy]phosphin
yl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-
(3'→5')-2'-deoxyguanosine and
3'-[3-[[4-[2-[4-[[3-(phosphonoxy)propyl]amino]carbonyl]phenyl]ethenyl]be
nzoyl]amino]propyl] 2'-deoxycytidylyl-(3'→5')-thymidylyl-
(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-

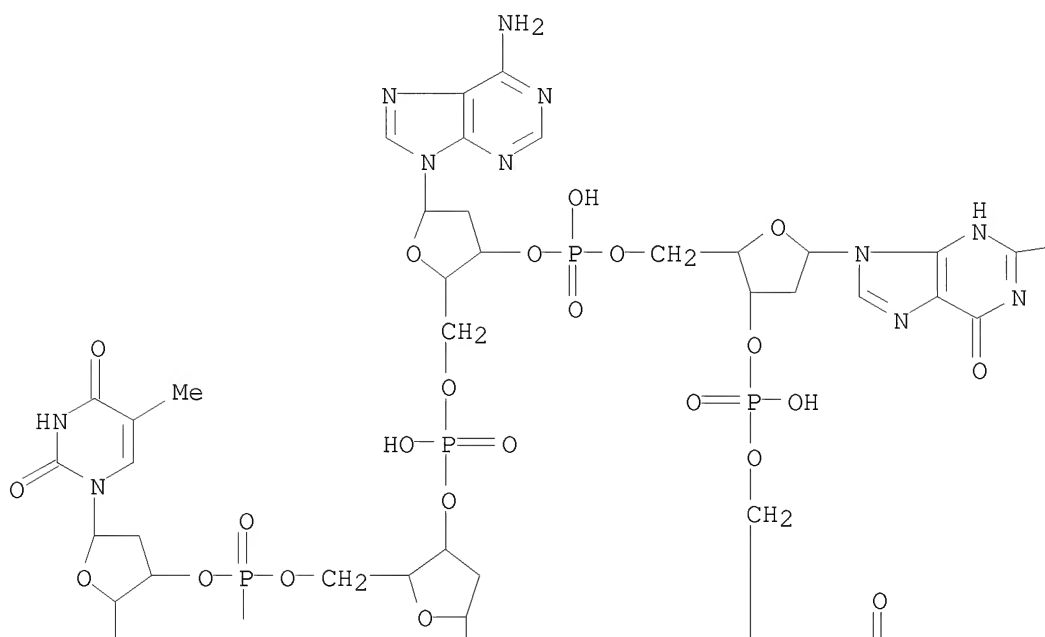
(3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-
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 NAME)

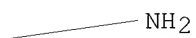
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CRN 197592-25-9

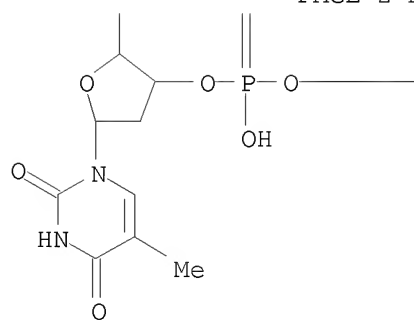
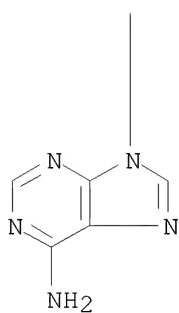
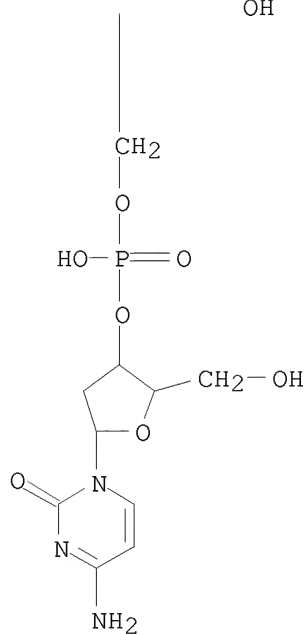
CMF C100 H126 N29 O56 P9

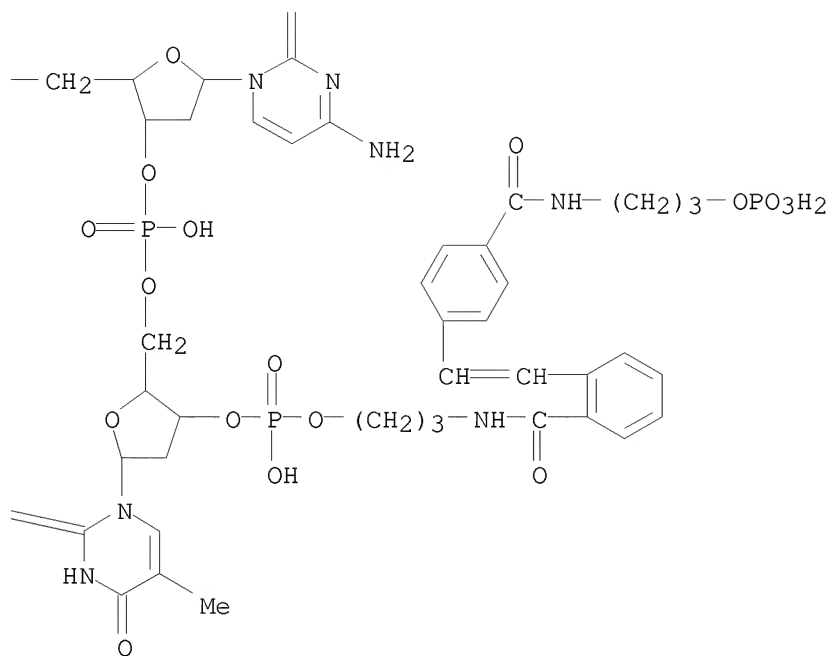
PAGE 1-A





OH





CM 2

CRN 197592-19-1

CMF Unspecified

CCI MAN

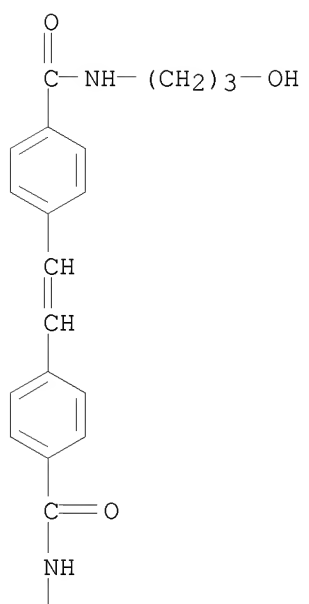
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CM 3

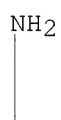
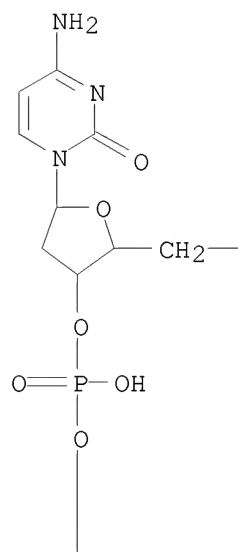
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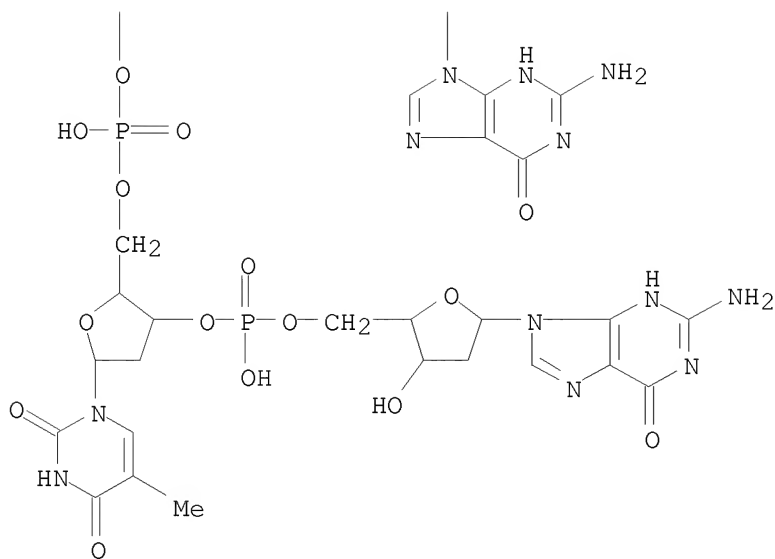
CMF C100 H124 N32 O52 P8

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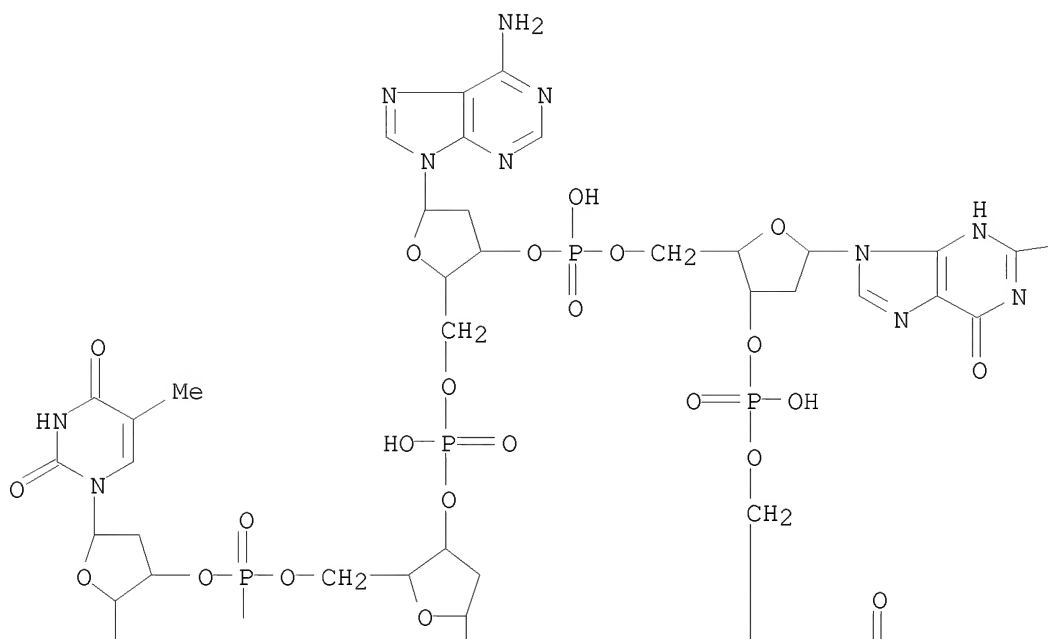


RN 197664-07-6 CAPLUS
 CN DNA, d(C-A-G-C-T-T-G-A-A-T-A-C-T-T-A-G), complex with
 5'-O-[hydroxy[3-[[4-[2-[4-[[3-
 hydroxypropyl]amino]carbonyl]phenyl]ethenyl]benzoyl]amino]propoxy]phosphin
 yl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyguanosine and
 3'-[3-[[4-[2-[4-[[3-(phosphonoxy)propyl]amino]carbonyl]phenyl]ethenyl]be
 nzoyl]amino]propyl] 2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-
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 NAME)

CM 1

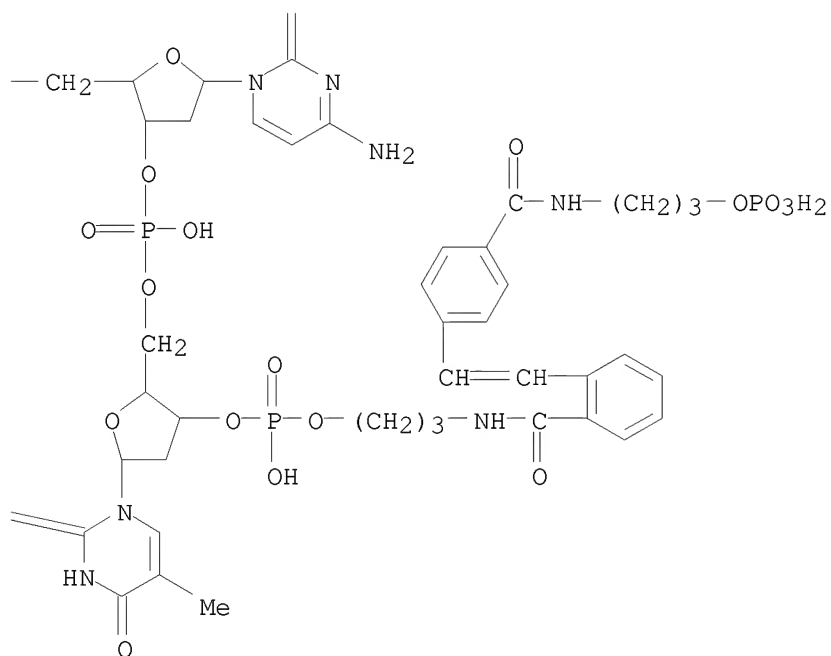
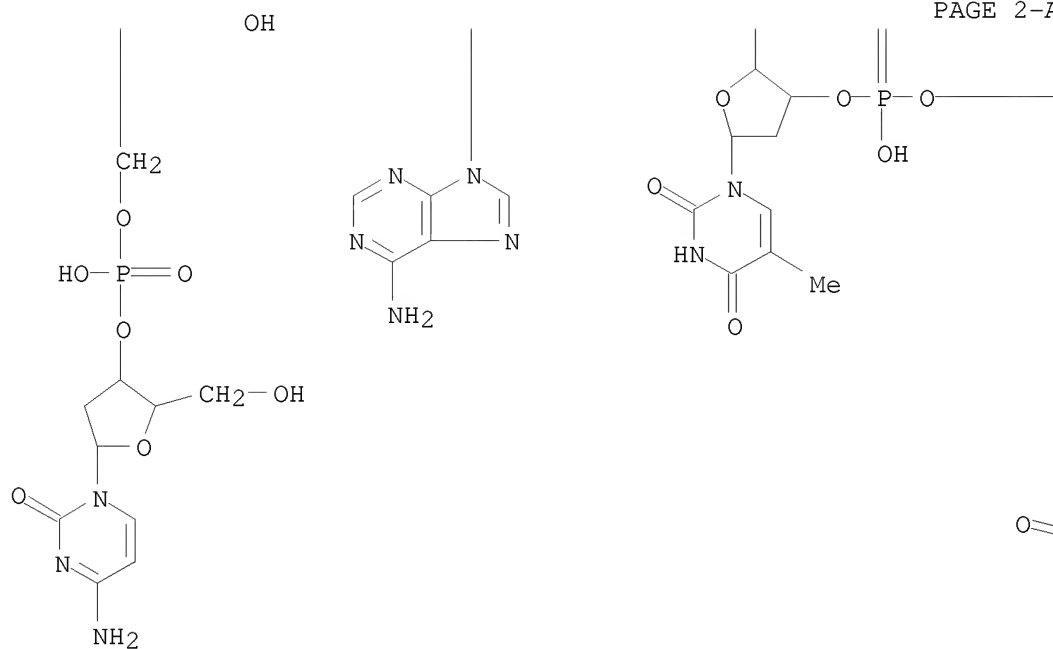
CRN 197592-25-9
 CMF C100 H126 N29 O56 P9

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CRN 197592-22-6
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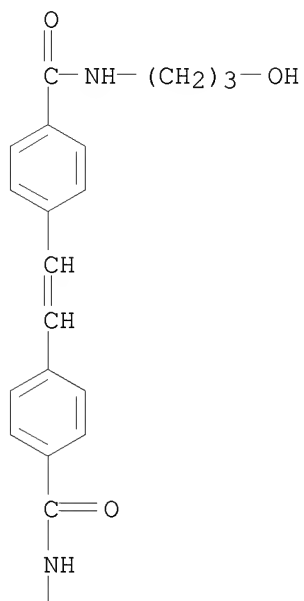
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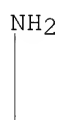
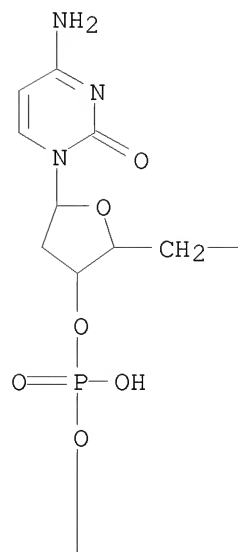
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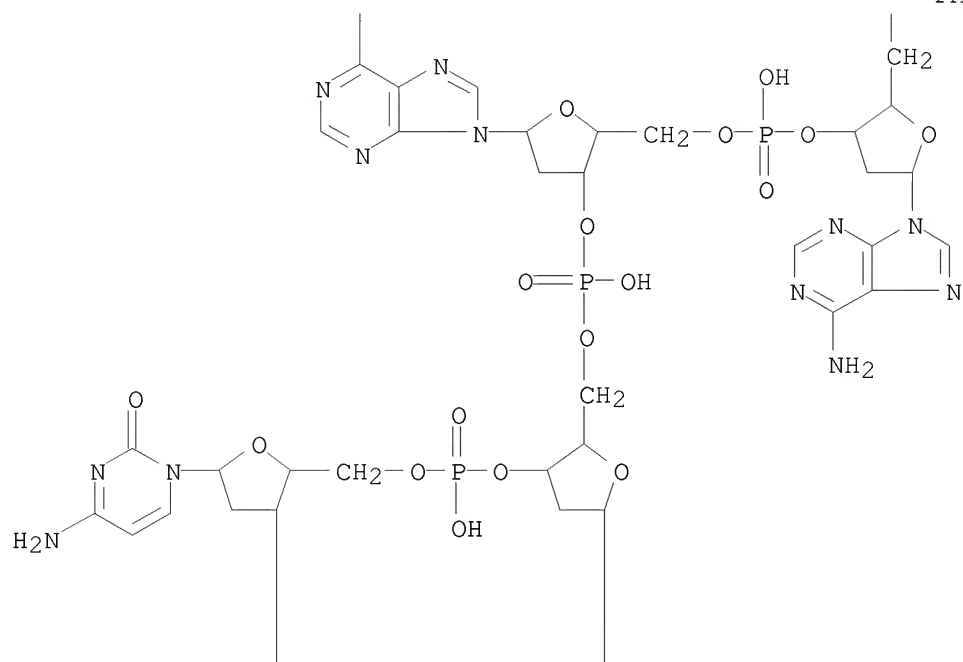
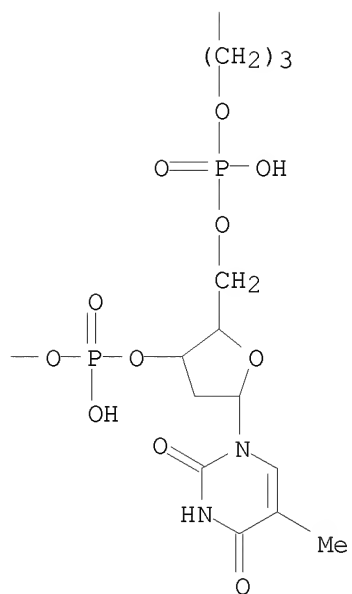
CMF C100 H124 N32 O52 P8

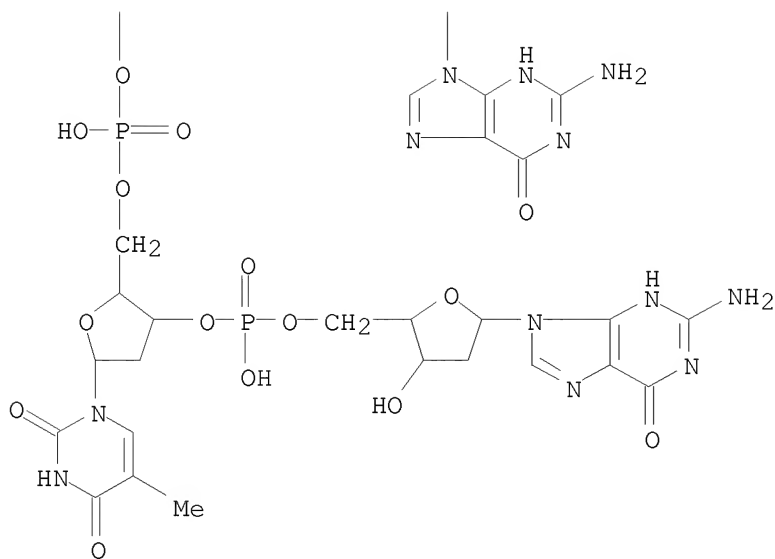
PAGE 1-B



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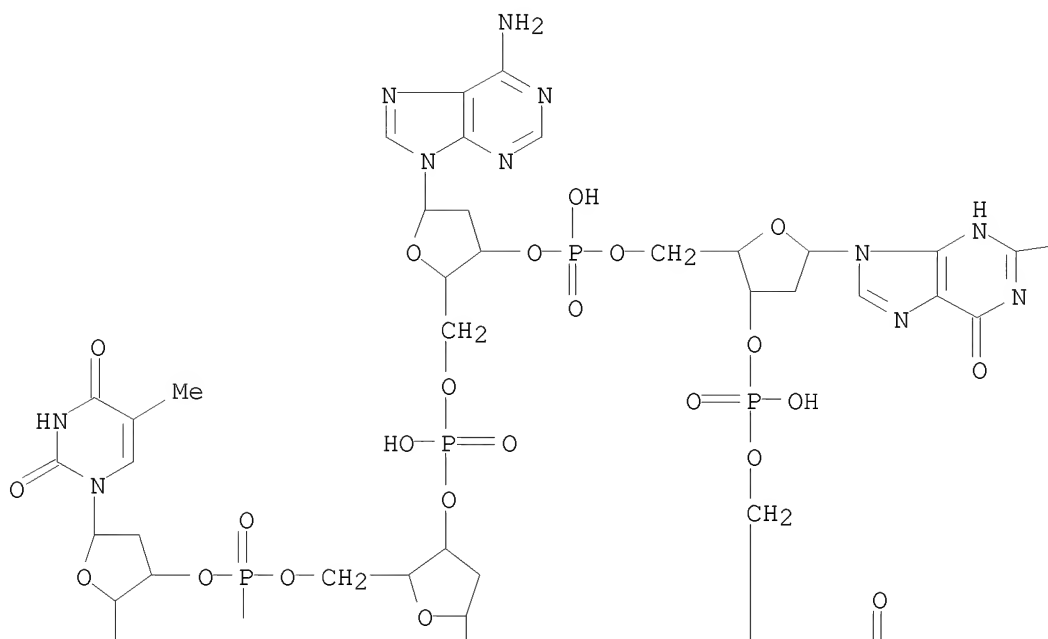


RN 197664-08-7 CAPLUS
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 hydroxypropyl]amino]carbonyl]phenyl]ethenyl]benzoyl]amino]propoxy]phosphin
 yl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyguanosine and
 3'-[3-[[4-[2-[4-[[3-(phosphonoxy)propyl]amino]carbonyl]phenyl]ethenyl]be
 nzoyl]amino]propyl] 2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-
 2'-deoxycytidylyl-(3'→5')-3'-thymidylate (1:1:1) (9CI) (CA INDEX
 NAME)

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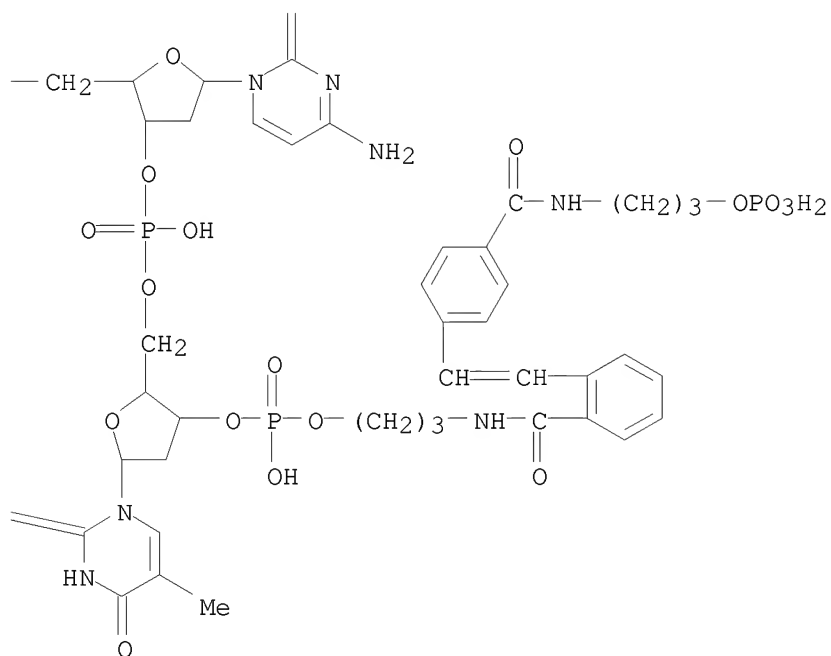
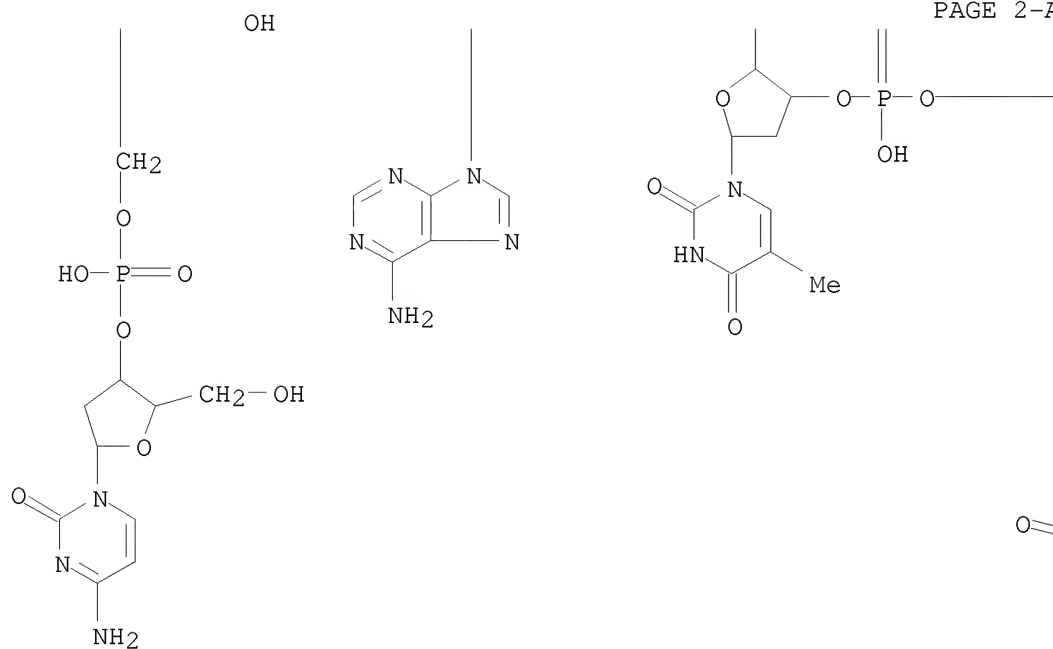
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 CMF C100 H126 N29 O56 P9

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CM 2

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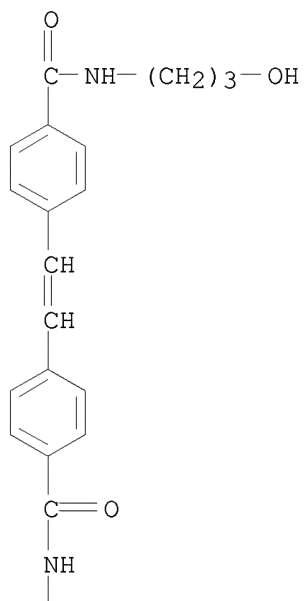
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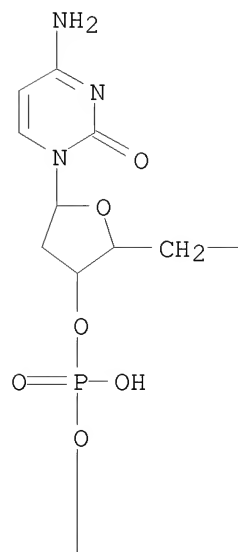
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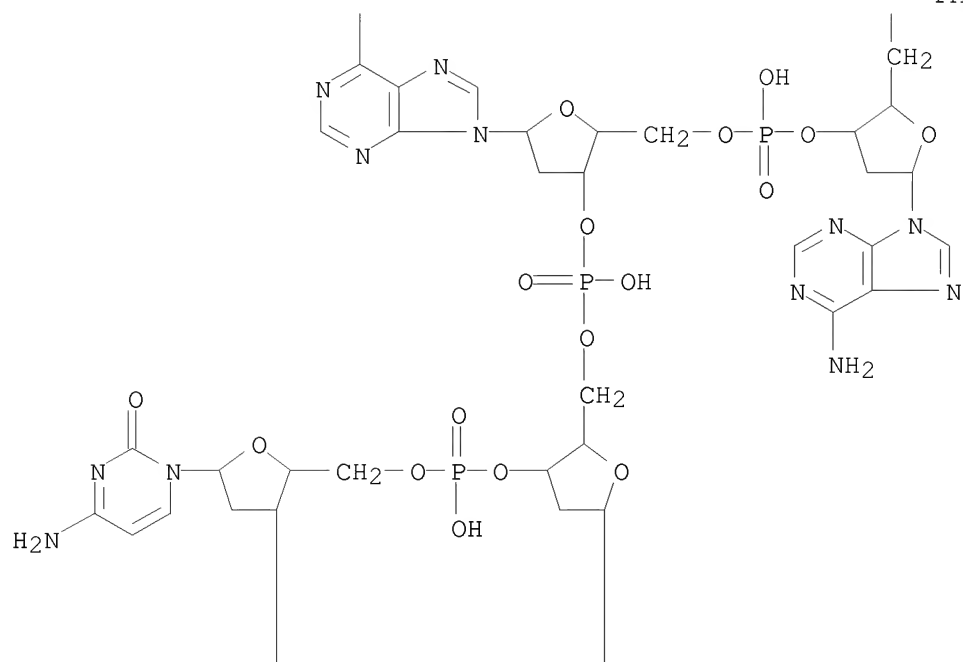
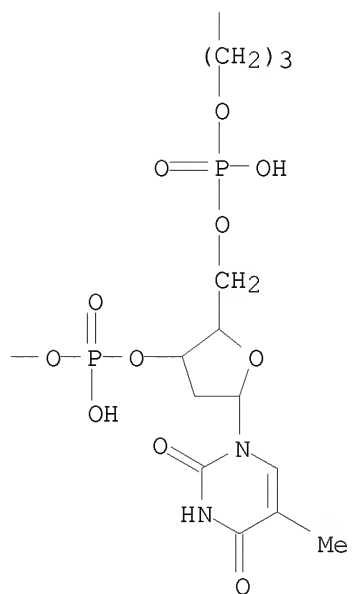
CMF C100 H124 N32 O52 P8

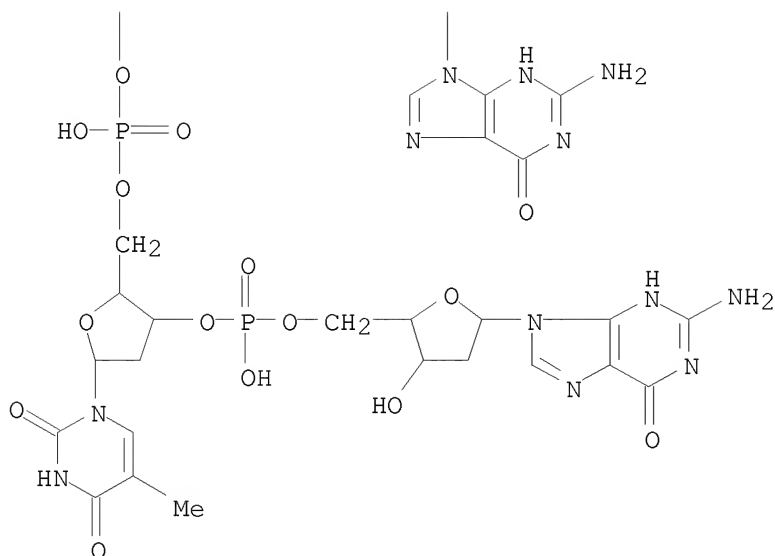
PAGE 1-B



PAGE 2-A





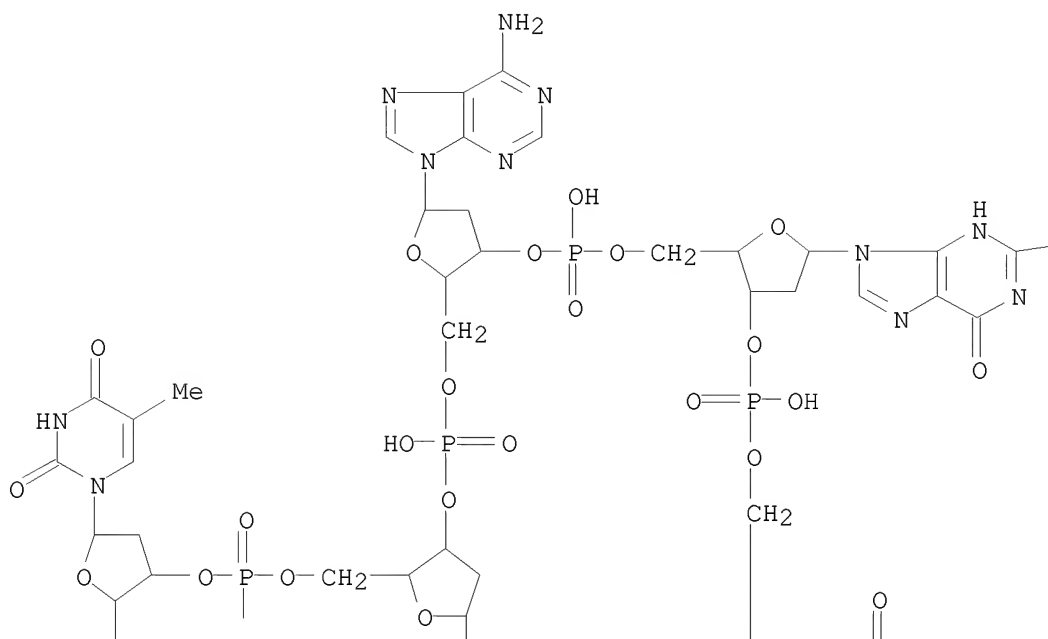


RN 197732-86-8 CAPLUS
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 yl]thymidylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyguanosine and
 3'-[3-[[4-[2-[4-[[3-(phosphonoxy)propyl]amino]carbonyl]phenyl]ethenyl]be
 nzoyl]amino]propyl] 2'-deoxycytidylyl-(3'→5')-thymidylyl-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-
 (3'→5')-2'-deoxyguanylyl-(3'→5')-thymidylyl-(3'→5')-
 2'-deoxycytidylyl-(3'→5')-3'-thymidylate (1:1:1) (9CI) (CA INDEX
 NAME)

CM 1

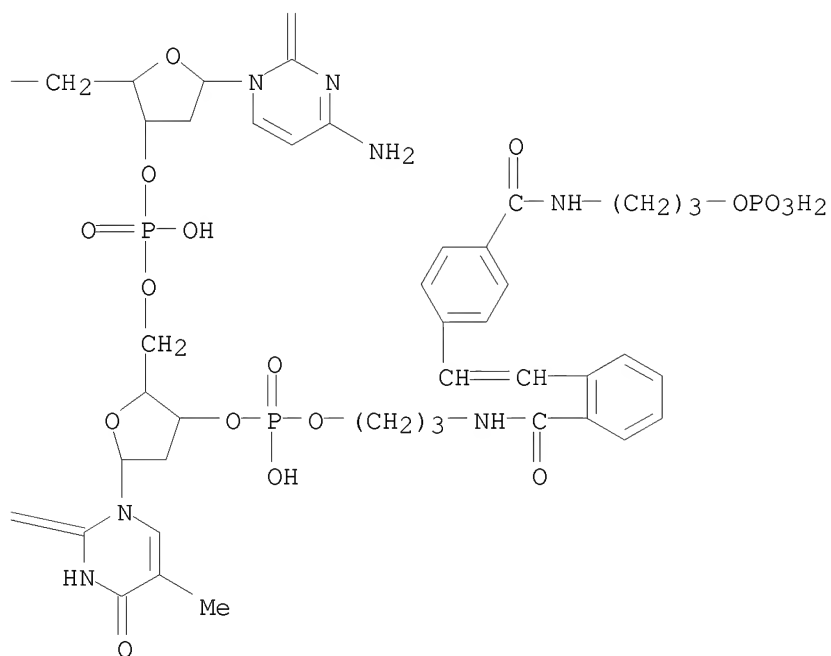
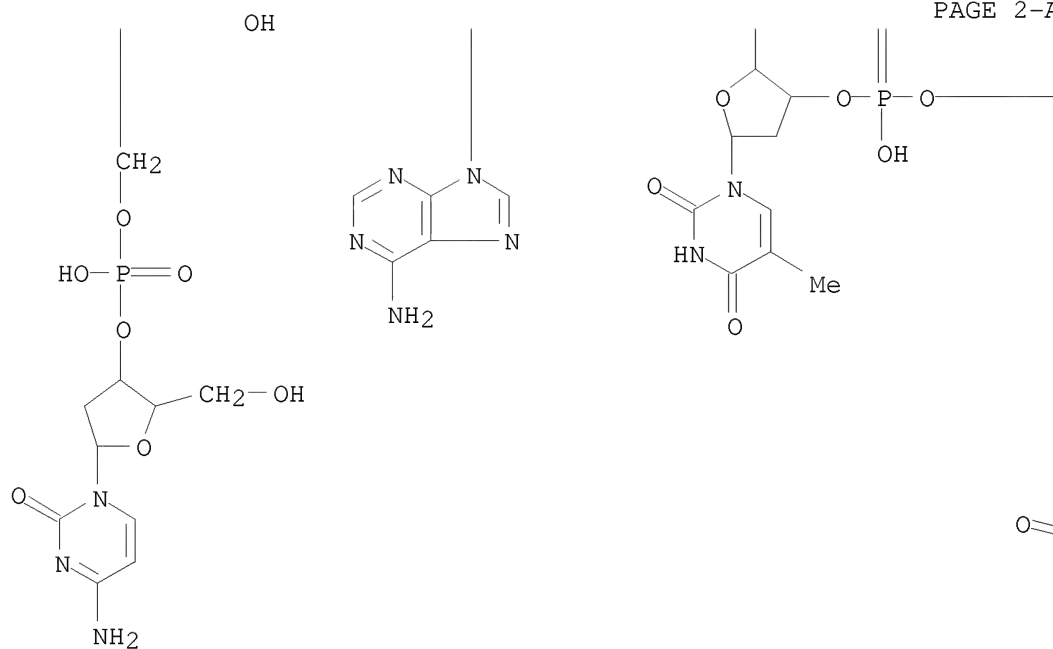
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PAGE 1-A



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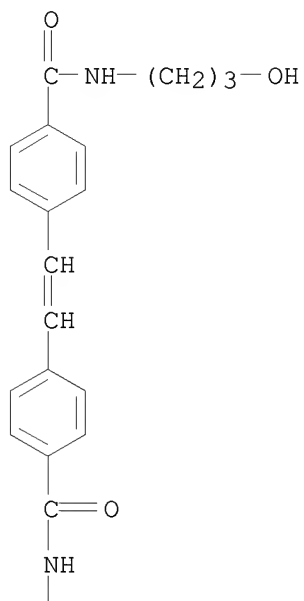
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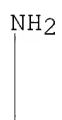
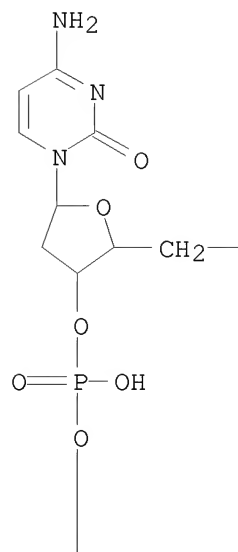
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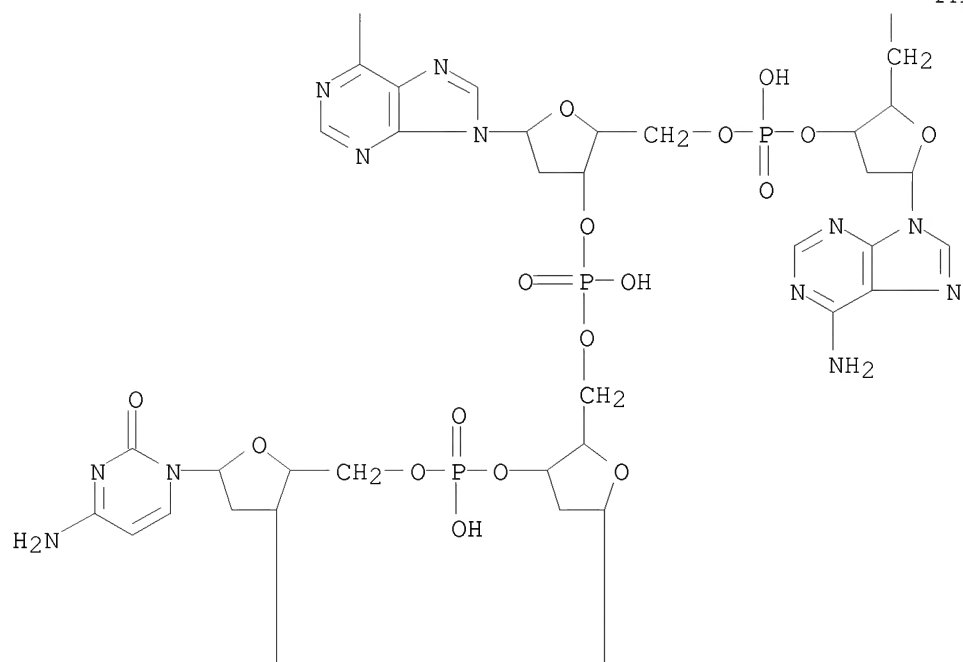
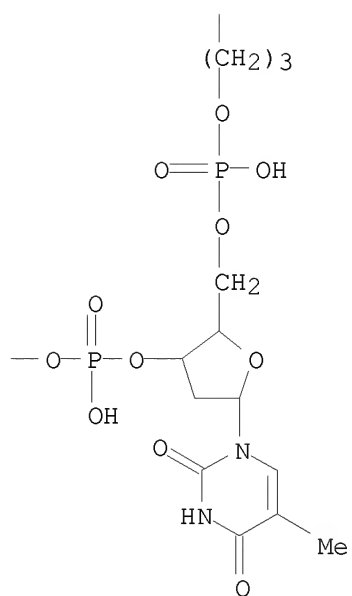
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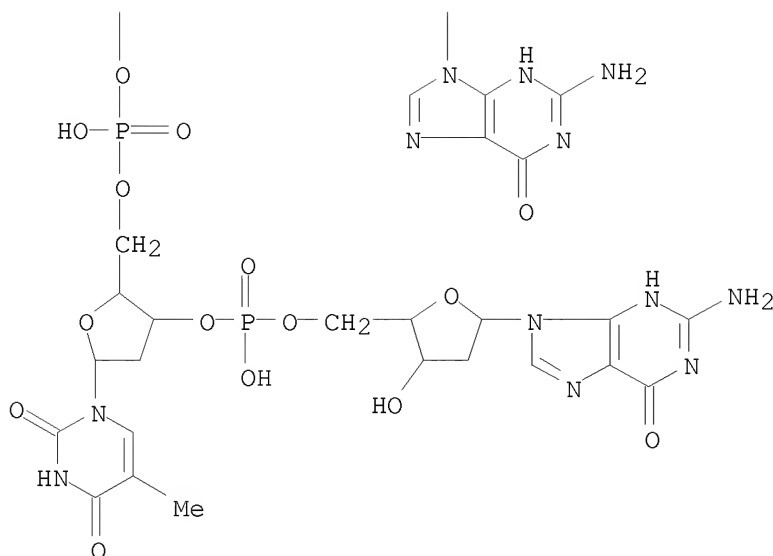
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PAGE 2-A







OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS
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 REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1997:251775 CAPLUS

DOCUMENT NUMBER: 126:330796

ORIGINAL REFERENCE NO.: 126:64295a,64298a

TITLE: Stability and conformational switching in a
 mini-cyclic oligonucleotide conjugate

AUTHOR(S): Herrlein, Mathias K.; Letsinger, Robert L.

CORPORATE SOURCE: Dep. Chem., Northwestern Univ., Evanston, IL, 60208,
 USA

SOURCE: Angewandte Chemie, International Edition in English (1997), 36(6), 599-601
 CODEN: ACIEAY; ISSN: 0570-0833

PUBLISHER: VCH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A four-base cyclic DNA mini-duplex containing two stilbenedicarboxamide bridges was synthesized, and its stability and conformational behavior was studied. Thus, 5'-tosylated T-X-AG-X-C-P(S)(OH)₂ [X = (CH₂)₃NHCO-p-C₆H₄-CH=CH-p-C₆H₄-CONH(CH₂)₃] was prepared; after standing 28 h at 22° in 1 M NaCl at pH 7, the mini-duplex cyclic DNA was recovered. The pattern of stilbenedicarboxamide fluorescence for this DNA was reversed from the usual, with single fluorophore behavior for the cyclic duplex and excimer behavior in the presence of alkali.

IT 189570-07-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepare, stability and conformational switching in a minicyclic oligonucleotide conjugate)

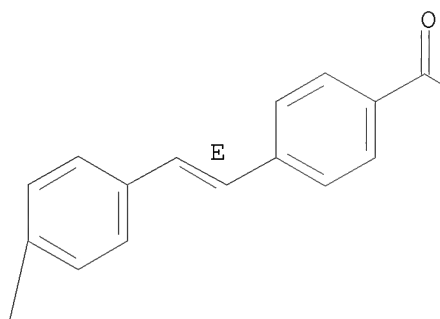
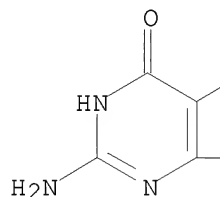
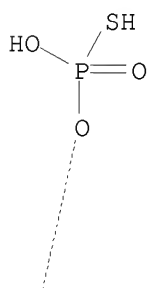
RN 189570-07-8 CAPLUS

CN Cytidine, 5'-O-[(4-methylphenyl)sulfonyl]thymidylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene[(1E)-1,2-ethenediyl]-1,4-phenylenecarbonylimino-1,3-propanediylxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyguanylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene[(1E)-1,2-ethenediyl]-1,4-

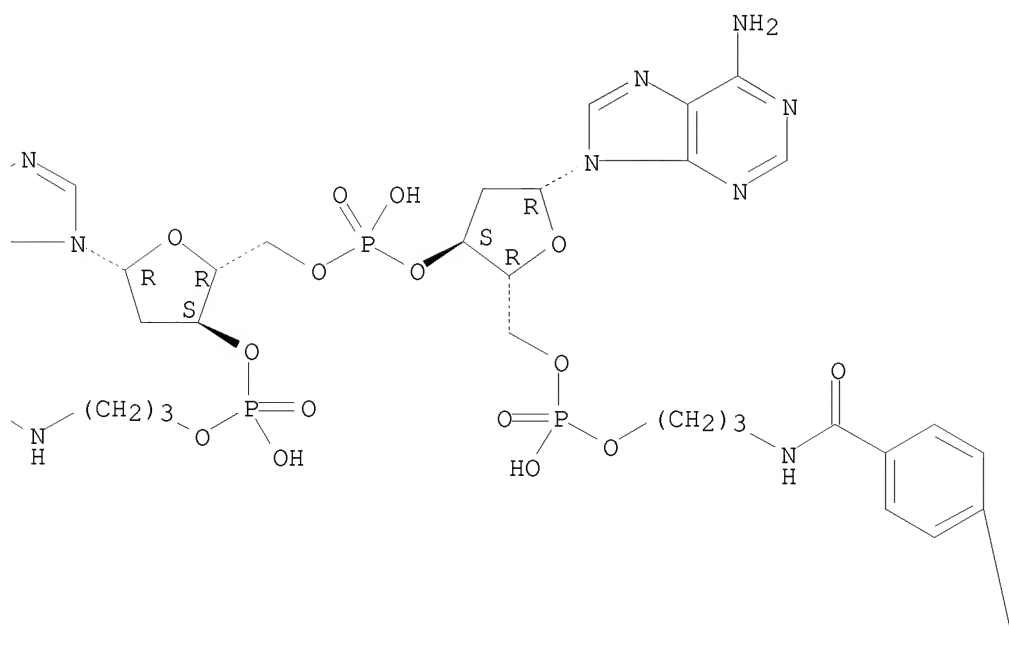
phenylenecarbonylimino-1,3-propanediylloxyphosphinico-(3'→5')-2'-
deoxy-, 3'-(dihydrogen phosphorothioate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

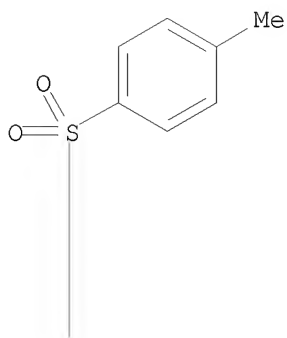
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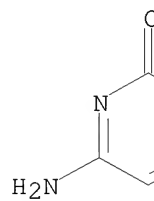
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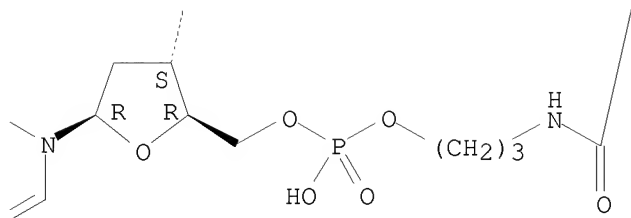
PAGE 1-D



PAGE 2-A

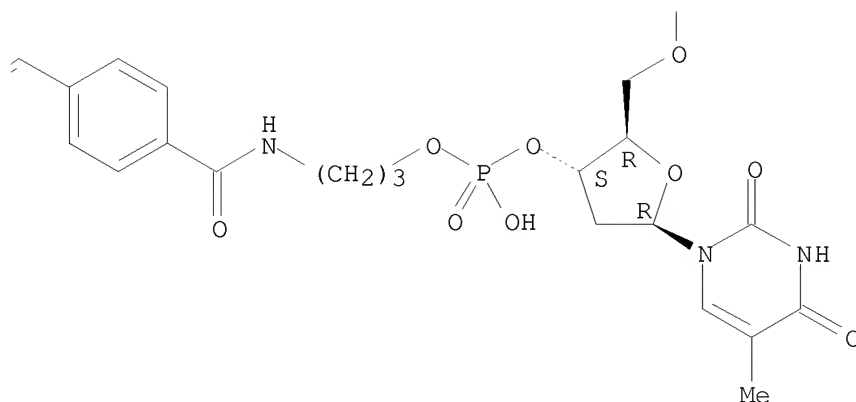


PAGE 2-B



PAGE 2-C





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 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1997:212527 CAPLUS

DOCUMENT NUMBER: 126:287684

ORIGINAL REFERENCE NO.: 126:55501a,55504a

TITLE: Minor products of reaction of DNA with α -acetoxytamoxifen

AUTHOR(S): Osborne, Martin R.; Hardcastle, Ian R.; Phillips, David H.

CORPORATE SOURCE: Section of Molecular Carcinogenesis, Haddow Laboratories, Institute of Cancer Research, Sutton, SM2 5NG, UK

SOURCE: Carcinogenesis (1997), 18(3), 539-543

CODEN: CRNGDP; ISSN: 0143-3334

PUBLISHER: Oxford University Press

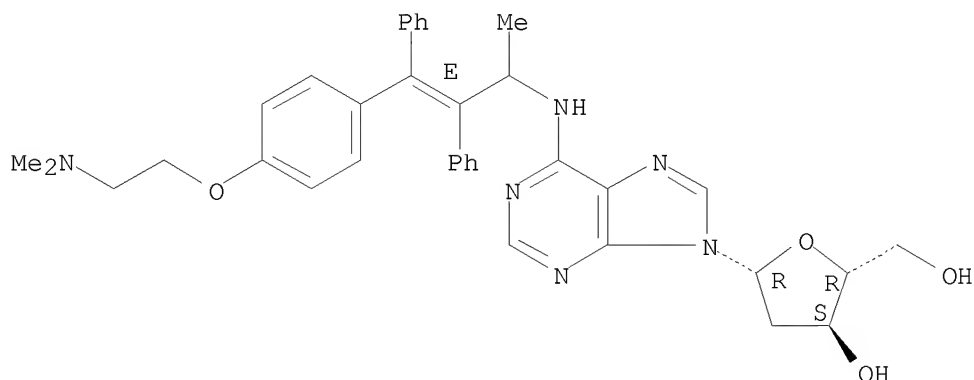
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The drug tamoxifen shows evidence of genotoxicity and induces liver tumors in rats. Covalent DNA adducts have been detected in the liver of rats treated with tamoxifen and these arise, at least in part, from its metabolite α -hydroxytamoxifen. This probably undergoes conjugation in the liver tissue to give an ester, which alkylates DNA. The authors have prepared α -acetoxytamoxifen as a model for this reactive intermediate and studied its reaction with DNA in vitro. The products of this reaction were chromatog. identical to DNA adducts found in the liver of rats treated with tamoxifen. The authors have isolated three of these products as the nucleosides TG1, TG2 and TA1 and identified them by UV, mass and proton magnetic resonance spectroscopy. TG1 and TG2 were tamoxifen-deoxyguanosine adducts in which the α -position of tamoxifen was linked to the amino group of guanine; TG1, (E)-4-{4-[2-(dimethylamino)ethoxy]phenyl}-3,4-diphenyl-2-(9 β -deoxyribofuranosyl-6-oxopurin-2-ylamino)-3-butene; TG2, (Z) isomer of TG1. In TG2, the tamoxifen group had undergone trans-cis isomerization. The minor product TA1 was a tamoxifen-deoxyadenosine adduct, where linkage was through the amino group of adenine: (E)-4-{4-[2-(dimethylamino)ethoxy]phenyl}-3,4-diphenyl-2-(9 β -deoxyribofuranosylpurin-6-ylamino)-3-butene. These three adducts accounted for >90% of the reaction products (.apprx.67% TG1, 18% TG2 and 7% TA1); trace products included other stereoisomers of these and dinucleotide adducts which resisted enzymic digestion.

IT 189191-14-8
 RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
 (minor products of reaction of DNA with α -acetyltamoxifen in relation to tamoxifen genotoxicity)
 RN 189191-14-8 CAPLUS
 CN Adenosine, 2'-deoxy-N-[(2E)-3-[4-[2-(dimethylamino)ethoxy]phenyl]-1-methyl-2,3-diphenyl-2-propenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



OS.CITING REF COUNT: 46 THERE ARE 46 CAPLUS RECORDS THAT CITE THIS RECORD (46 CITINGS)

L3 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1995:683278 CAPLUS
 DOCUMENT NUMBER: 123:257232
 ORIGINAL REFERENCE NO.: 123:46023a, 46026a
 TITLE: Use of a Stilbenedicarboxamide Bridge in Stabilizing, Monitoring, and Photochemically Altering Folded Conformations of Oligonucleotides
 AUTHOR(S): Letsinger, Robert L.; Wu, Taifeng
 CORPORATE SOURCE: Department of Chemistry, Northwestern University, Evanston, IL, 60208, USA
 SOURCE: Journal of the American Chemical Society (1995), 117(28), 7323-8
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A stilbenedicarboxamide bridge ($-\Sigma-$) is shown to serve as a unique and unusually effective cap for stabilizing and characterizing short oligodeoxyribonucleotide double and triple stranded structures. As representative of the stability of a family of oligomers studied, T_m values for the thermal transitions in 0.1 M NaCl of the hairpin forms of dTTT- Σ -dAAA and dGCG- Σ -dCGC are .apprx.42 °C and >80 °C, resp., and T_m for unfolding of the triple-stranded, double-hairpin conformation of d(TTTTTT- Σ -)2dAAAAA is 69 °C. The intercalating dye, ethidium, binds efficiently to the mini-hairpin structures formed by these conjugates, even to dTT- Σ -dAA, which has a single four-nucleotide pocket; and the DNA groove binding agent, Hoechst 33258, interacts with dTTT- Σ -dAAA as well as with longer conjugates. The distinctive monomer and excimer fluorescence bands for the stilbenedicarboxamide moiety provide useful information on the structures of these small organized domains, and photoinduced isomerization permits postsynthetic alteration of the geometry of the bridge and therefore

alteration of the hybridization properties of the conjugate. The sensitivity to light depends on the nucleotides abutting the linker. When stability to light is desired, it can be achieved by incorporating a dG-dC pair in this position.

IT 165689-49-6 165689-50-9 165689-51-0
 165689-52-1 165689-52-1D, self-complimentary duplex
 165689-56-5 165689-56-5D, self-complimentary duplex
 165689-57-6 165689-57-6D, self-complimentary duplex

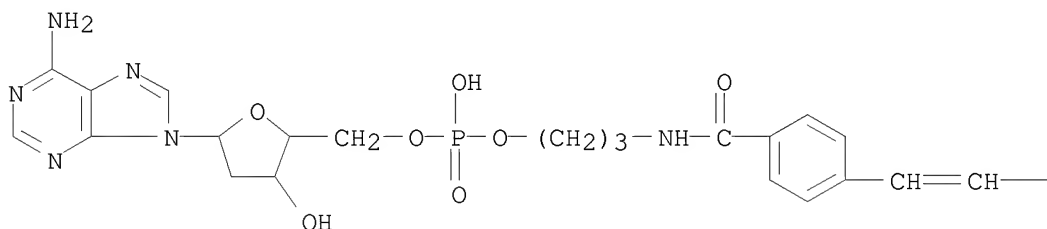
RL: PRP (Properties)

(use of a stilbenedicarboxamide bridge in stabilizing monitoring and photochem. altering folded conformations of oligodeoxyribonucleotides)

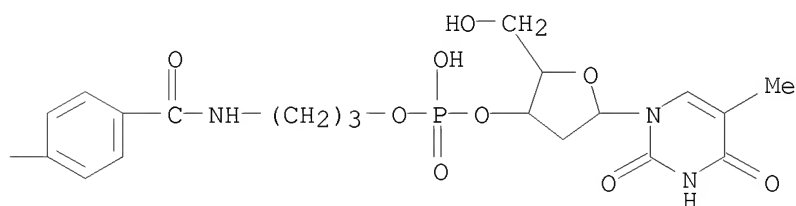
RN 165689-49-6 CAPLUS

CN Adenosine, thymidylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-2'-deoxy-, (E)- (9CI) (CA INDEX NAME)

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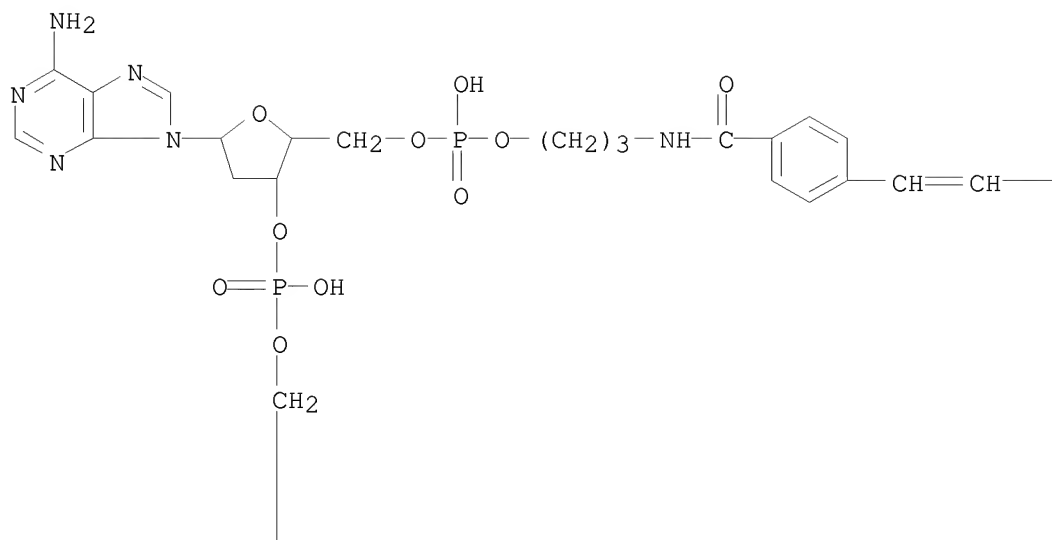
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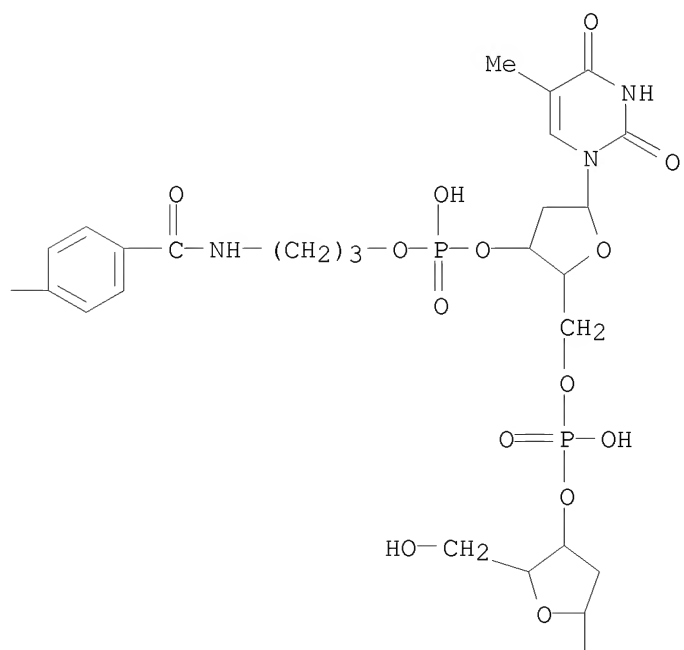
RN 165689-50-9 CAPLUS

CN Adenosine, thymidylyl-(3'→5')-thymidylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-, (E)- (9CI) (CA INDEX NAME)

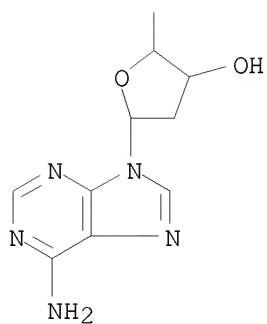
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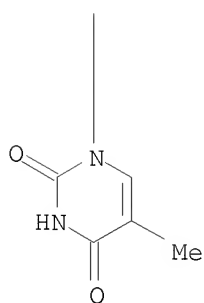
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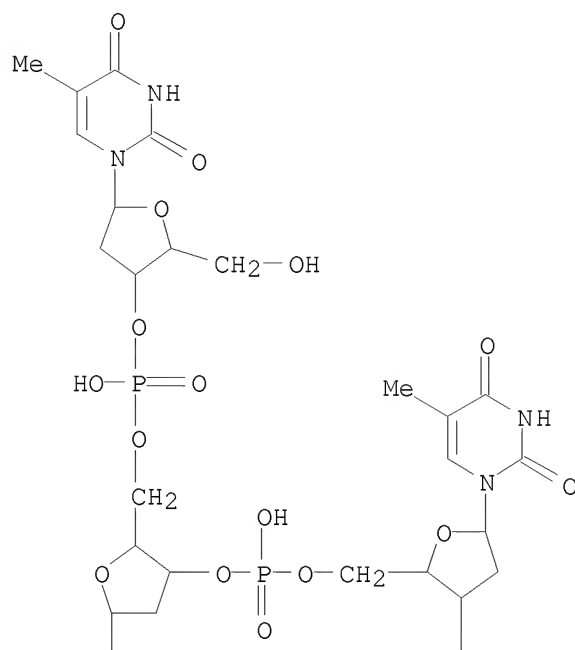


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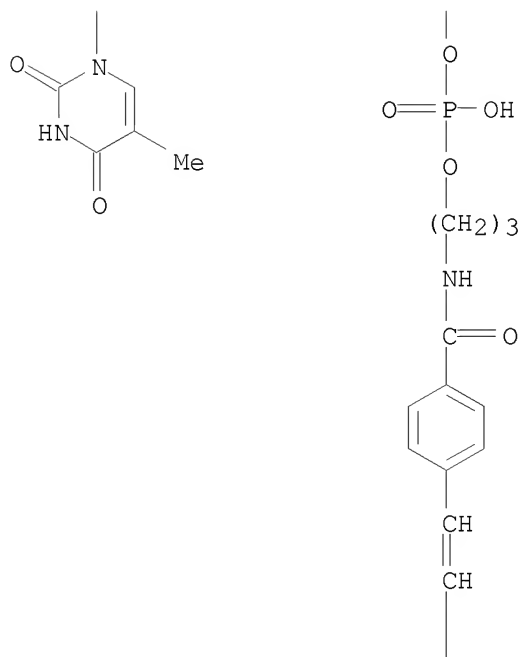


RN 165689-51-0 CAPLUS
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-
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1,4-phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxy-,
(E)- (9CI) (CA INDEX NAME)

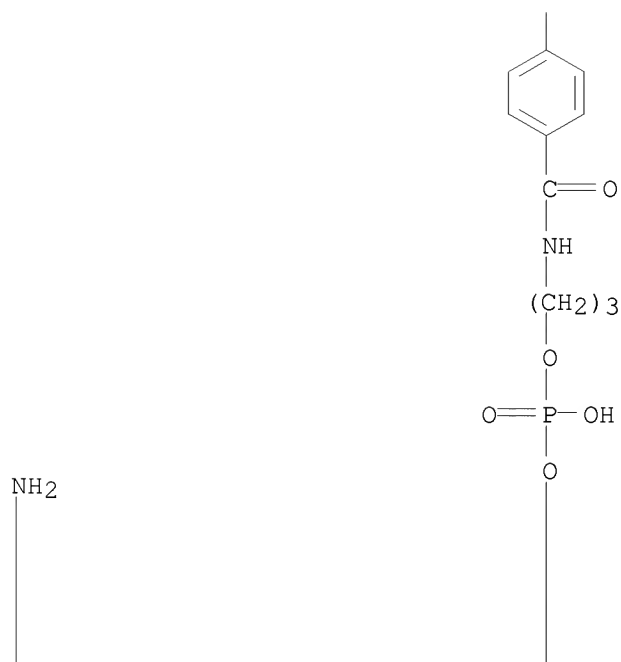
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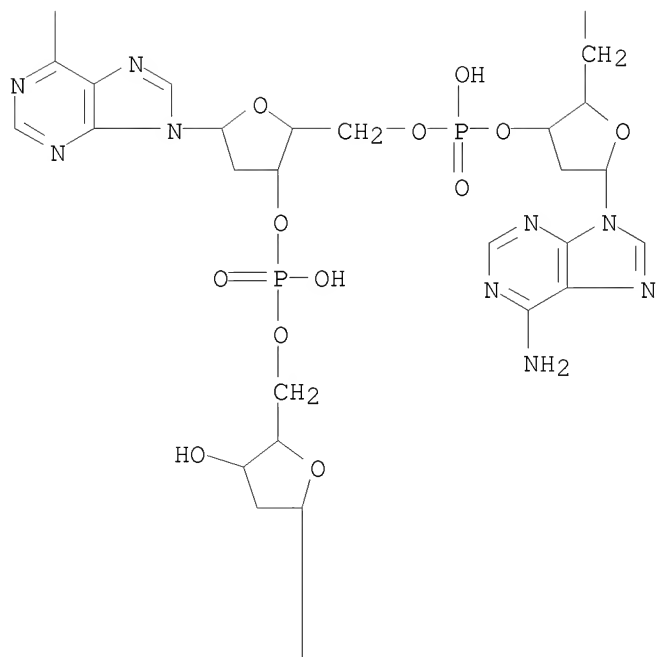
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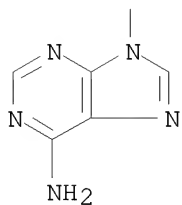


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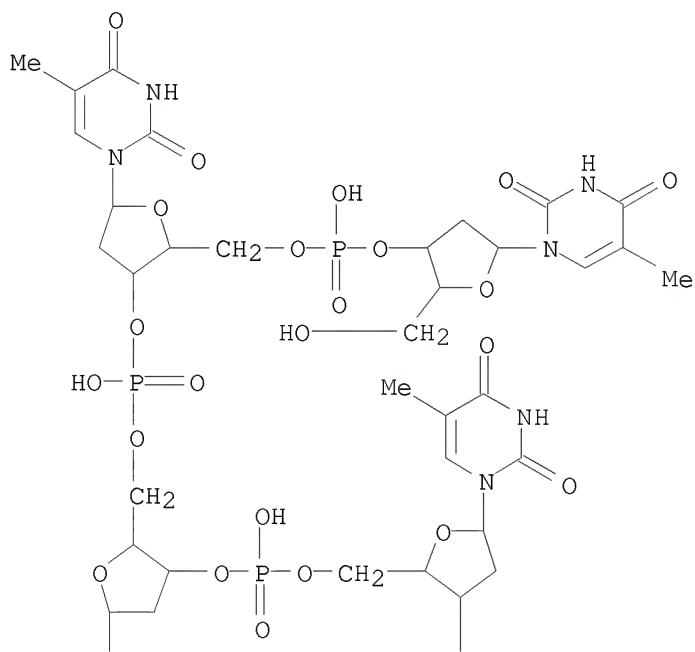


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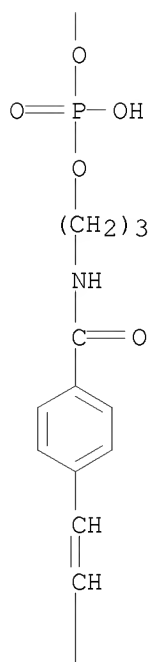
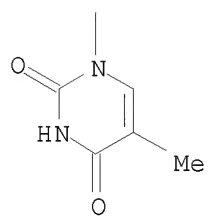




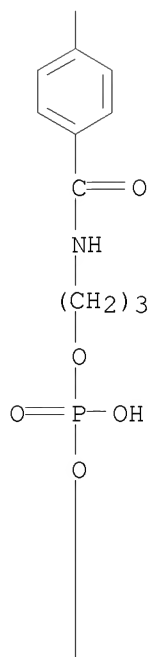
RN 165689-52-1 CAPLUS
 CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-
 (3'→5')-thymidylyloxy-1,3-propanediyliminocarbonyl-1,4-phenylene-
 1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediylxyphosphinico-
 (3'→5')-2'-deoxyadenylyl-(3'→5')-2'-deoxyadenylyl-
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 NAME)

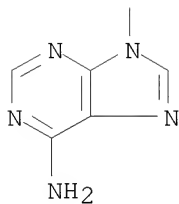
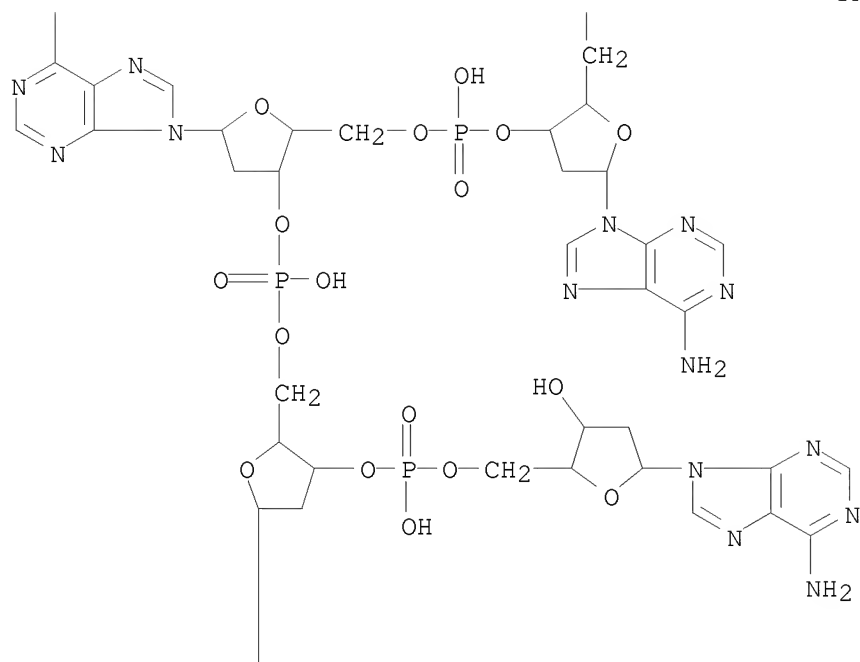


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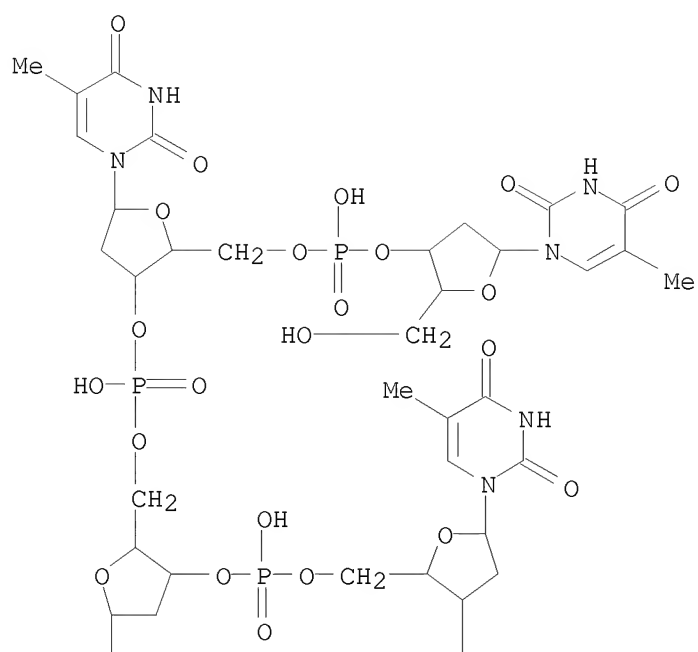
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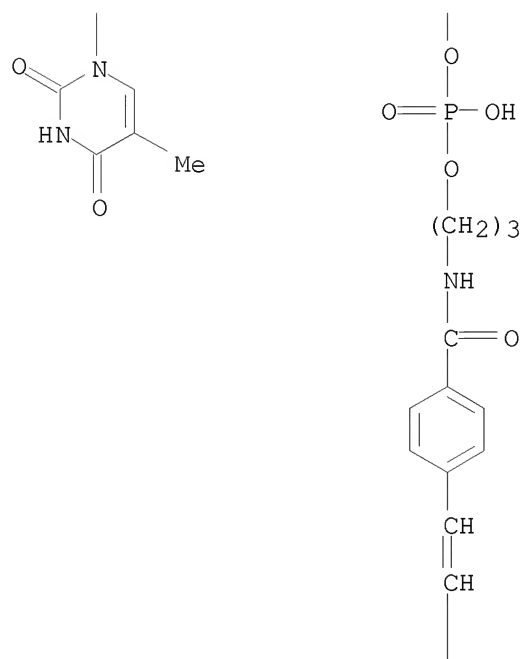


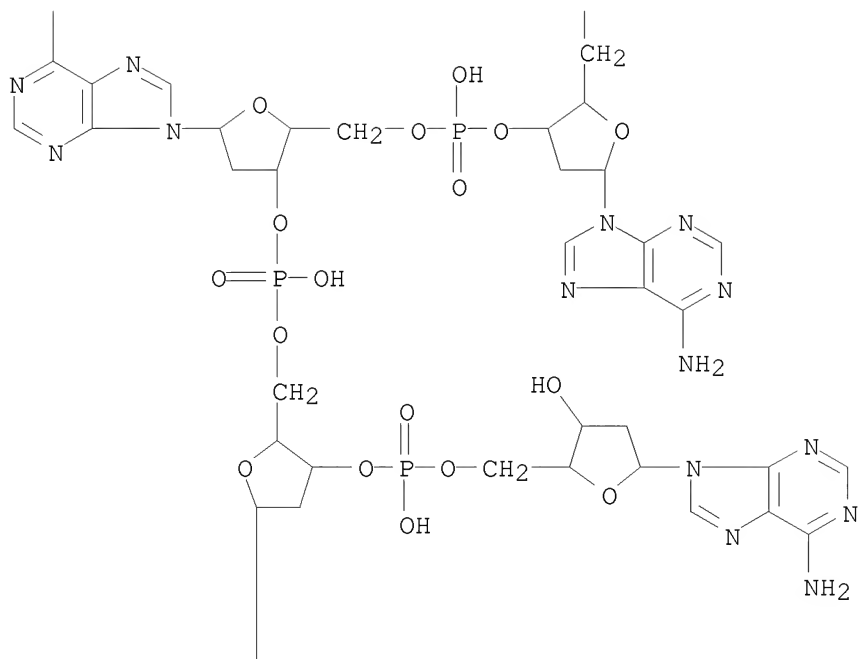
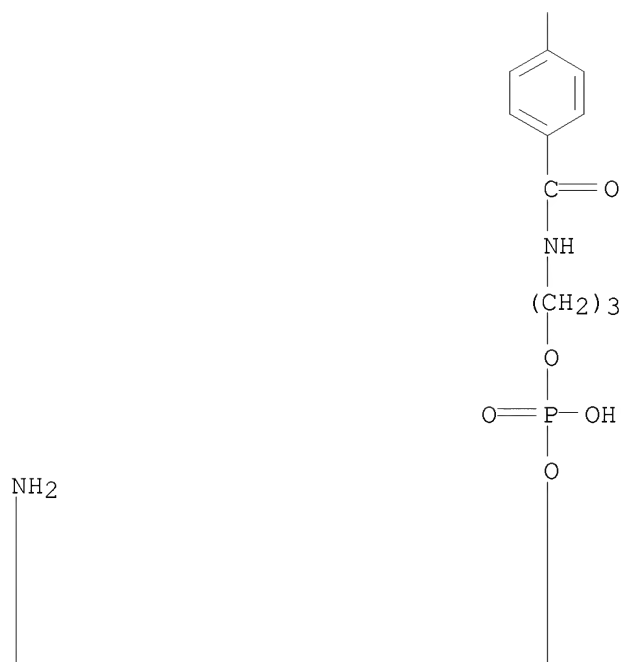
RN 165689-52-1 CAPLUS
 CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-thymidylyl-
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 1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-propanediylloxyphosphinico-
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 NAME)

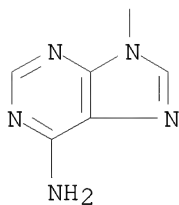
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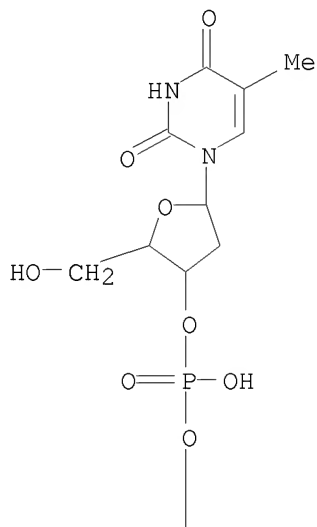




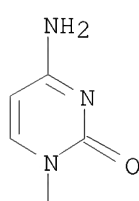
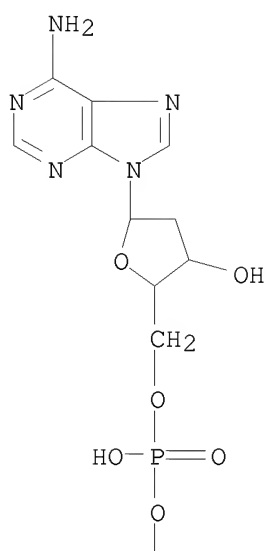


RN 165689-56-5 CAPLUS

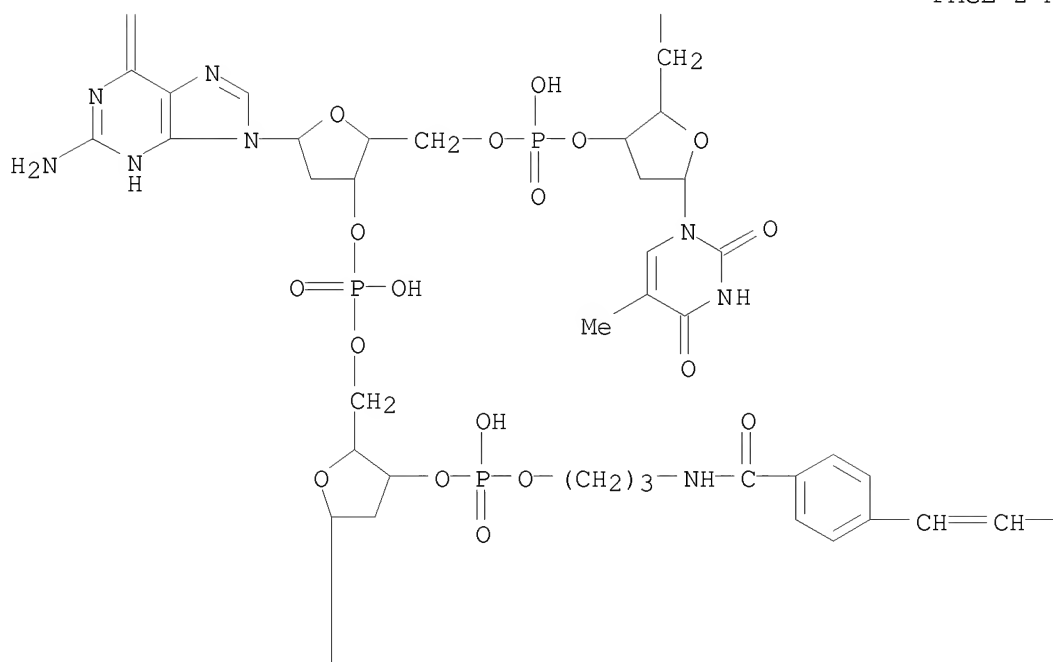
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
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 propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-
 phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-2'-
 deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
 deoxyadenylyl-(3'→5')-2'-deoxy-, (E)- (9CI) (CA INDEX NAME)

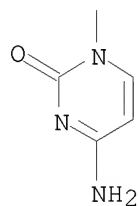
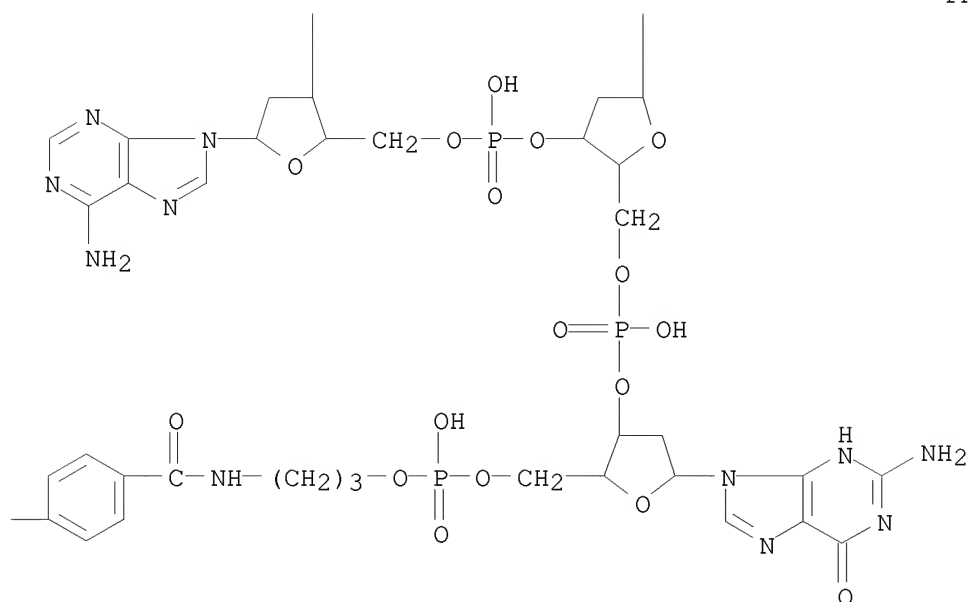


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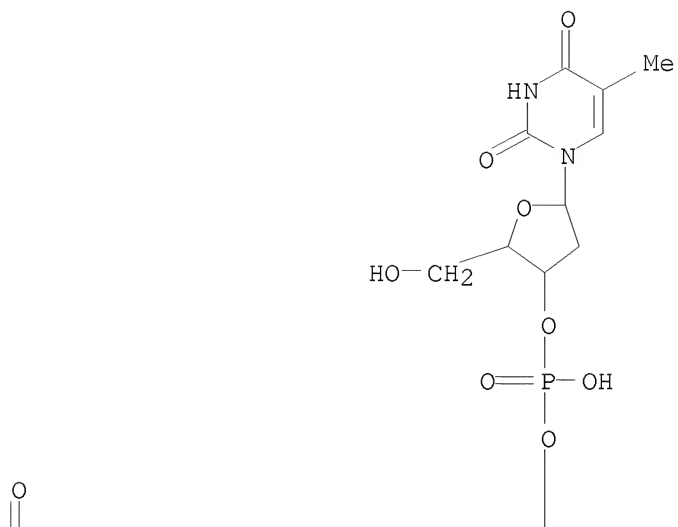




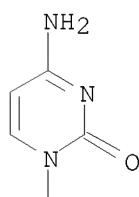
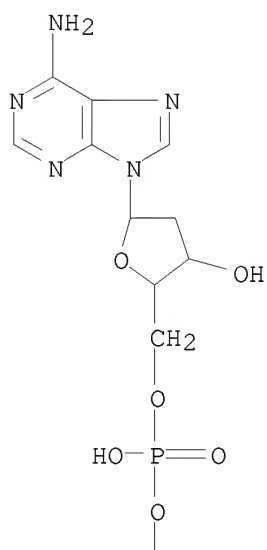
RN 165689-56-5 CAPLUS

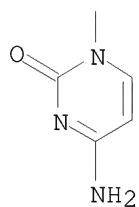
CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxycytidylyloxy-1,3-
propanediyliminocarbonyl-1,4-phenylene-1,2-ethenediyl-1,4-
phenylenecarbonylimino-1,3-propanediyl oxyphosphinico-(3'→5')-2'-
deoxyguanylyl-(3'→5')-2'-deoxycytidylyl-(3'→5')-2'-
deoxyadenylyl-(3'→5')-2'-deoxy-, (E)- (9CI) (CA INDEX NAME)

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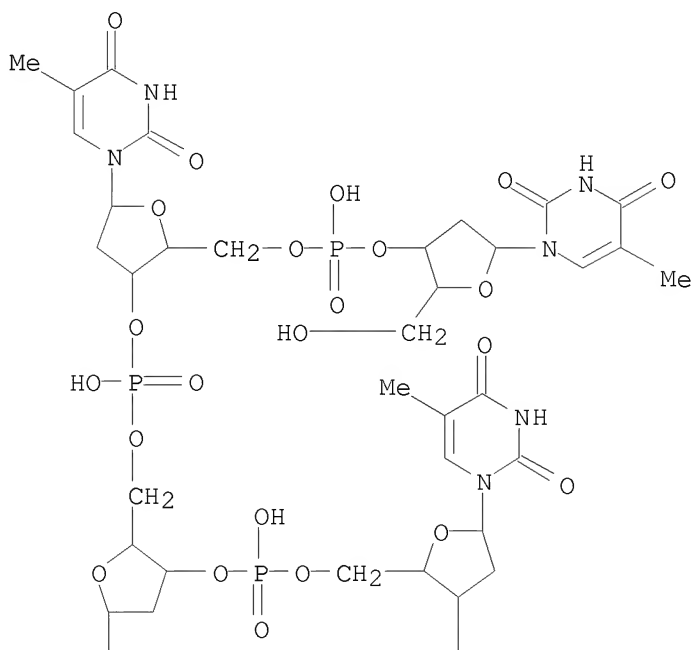


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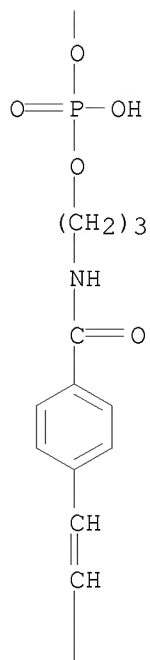
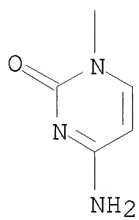




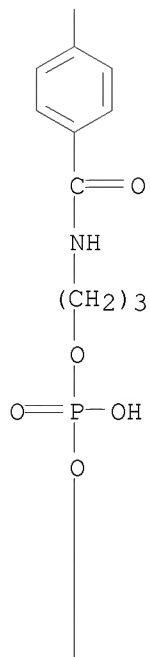
RN	165689-57-6	CAPLUS
CN	Adenosine, thymidyl-yl-(3'→5')-thymidyl-yl-(3'→5')-2'- deoxycytidyl-yl-(3'→5')-thymidyl-yl-oxo-1,3-propanediyliminocarbonyl- 1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3- propanediyl-oxophosphinico-(3'→5')-2'-deoxyadenyl-yl-(3'→5')- 2'-deoxyguanylyl-yl-(3'→5')-2'-deoxyadenyl-yl-(3'→5')-2'-deoxy-, (E)- (9CI) (CA INDEX NAME)	

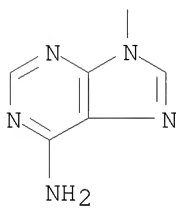
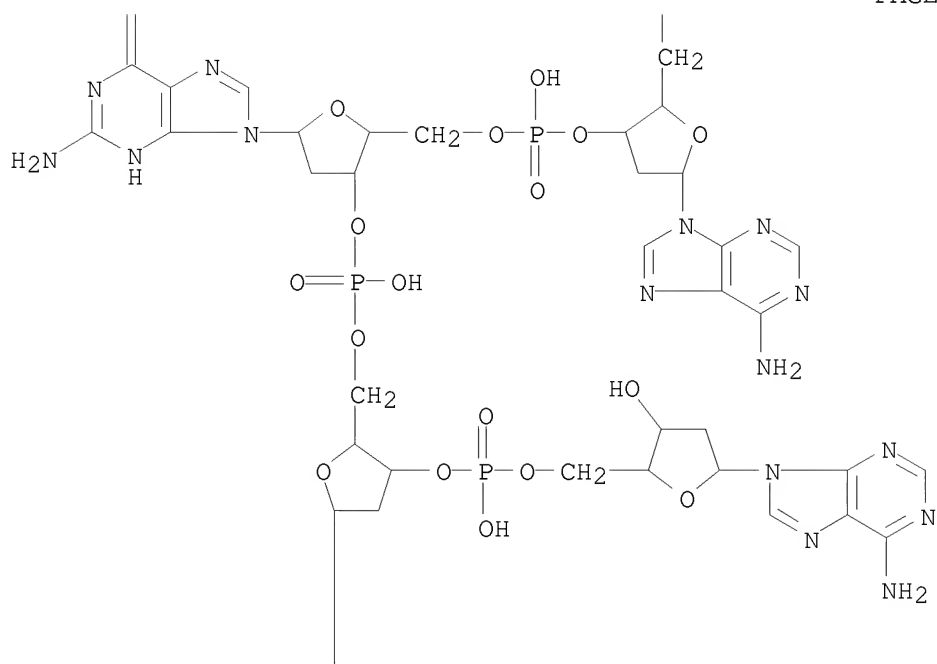


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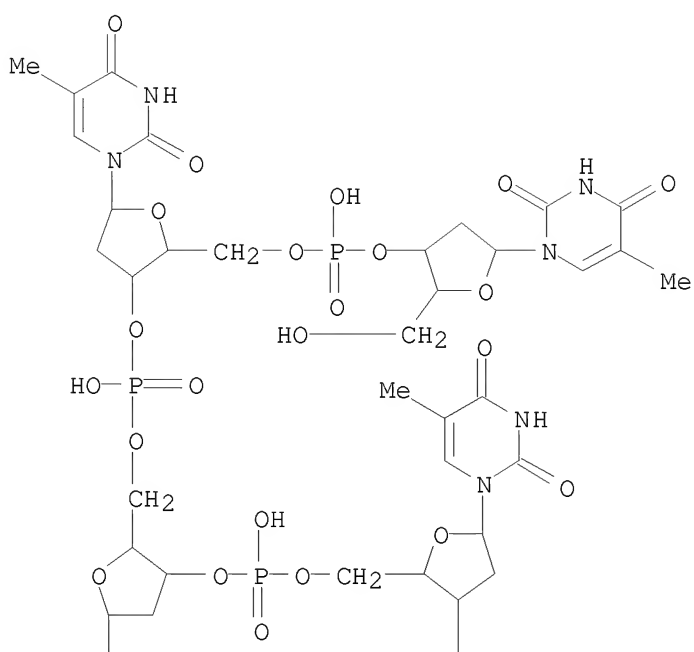
PAGE 3-A



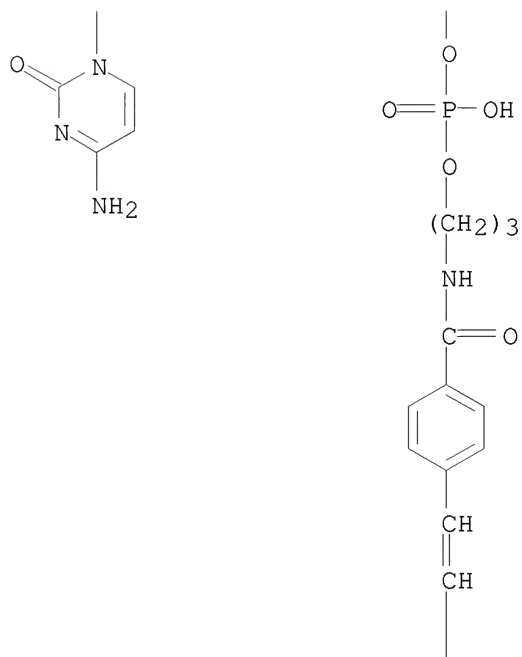


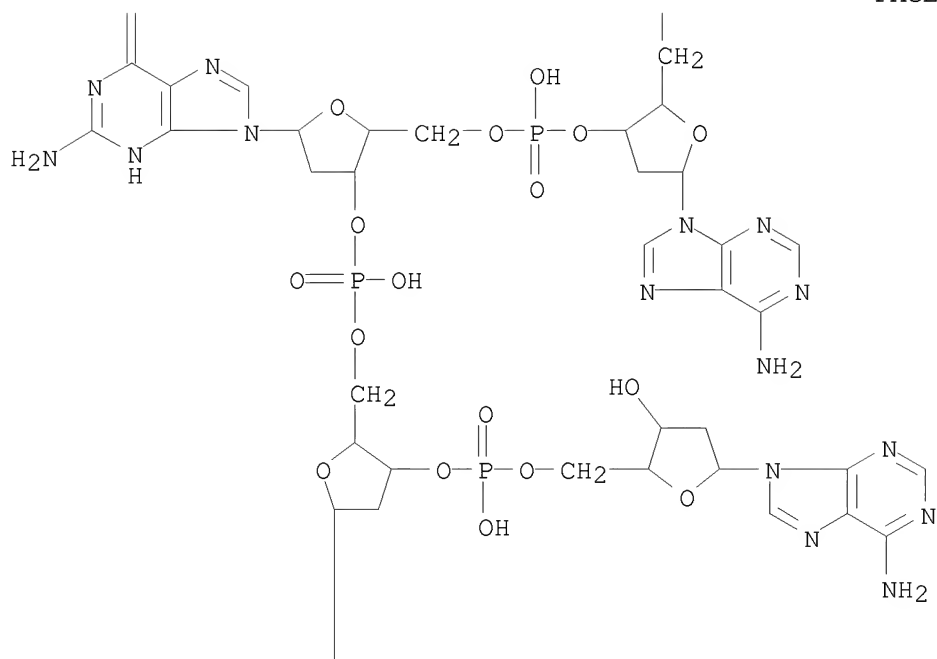
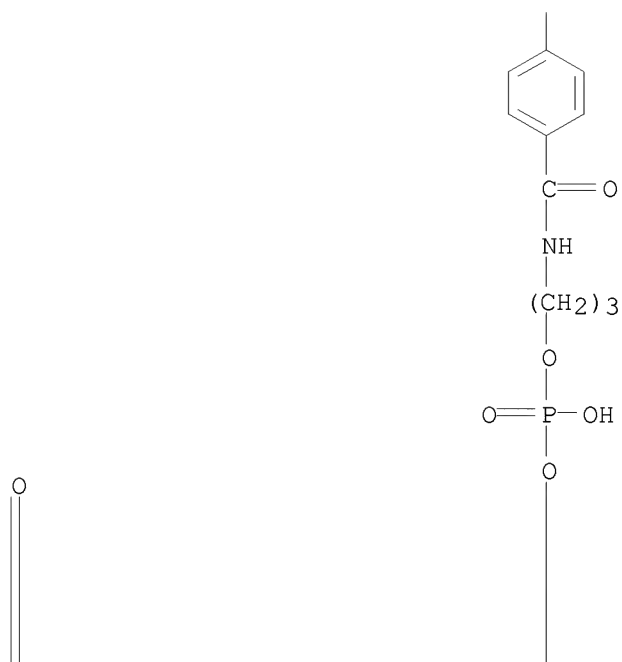
RN 165689-57-6 CAPLUS
 CN Adenosine, thymidylyl-(3'→5')-thymidylyl-(3'→5')-2'-
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 1,4-phenylene-1,2-ethenediyl-1,4-phenylenecarbonylimino-1,3-
 propanediylloxyphosphinico-(3'→5')-2'-deoxyadenylyl-(3'→5')-
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 (E)- (9CI) (CA INDEX NAME)

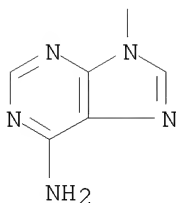
PAGE 1-A



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OS.CITING REF COUNT: 96 THERE ARE 96 CAPLUS RECORDS THAT CITE THIS RECORD (98 CITINGS)

L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1991:536564 CAPLUS

DOCUMENT NUMBER: 115:136564

ORIGINAL REFERENCE NO.: 115:23439a,23442a

TITLE: Highly selective adenosine A2 receptor agonists in a series of N-alkylated 2-aminoadenosines

AUTHOR(S): Francis, John E.; Webb, Randy L.; Ghai, Geetha R.; Hutchison, Alan J.; Moskal, Michael A.; DeJesus, Reynalda; Yokoyama, Rina; Rovinski, Stephen L.; Contardo, Nicolina; et al.

CORPORATE SOURCE: Pharm. Div., Ciba-Geigy Corp., Summit, NJ, 07901, USA

SOURCE: Journal of Medicinal Chemistry (1991), 34(8), 2570-9

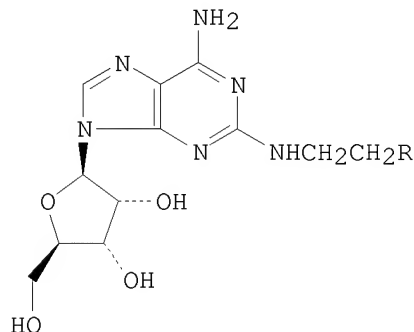
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:136564

GI

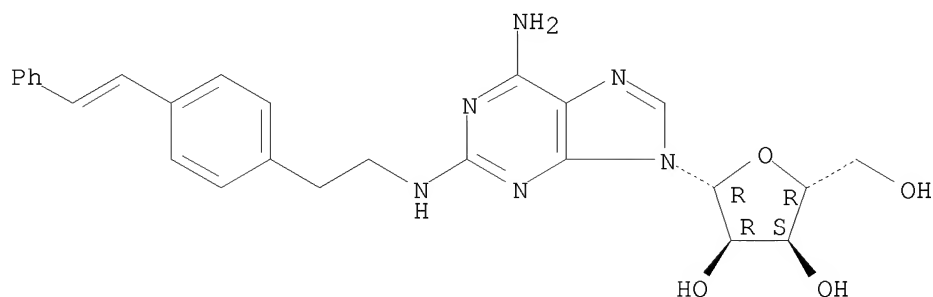


I

AB A wide variety of 2-substituted aminoadenosines were prepared for comparison with the moderately A2 receptor selective adenosine agonist 2-anilinoadenosine. High selectivity combined with significant affinity at the A2 receptor in rat membranes was observed for those amines bearing a two-carbon chain to which was attached an aryl, heteroaryl, or alicyclic moiety. 2-(2-Phenethylamino)adenosine, a 14-fold A2 selective compound, was modified by introduction of a variety of substituents in the benzene ring and the side chain. Some of these changes led to improved A2 affinity and increased selectivity. Replacement of the Ph moiety by cyclohexenyl produced a 210-fold selective agonist I (R = cyclohexenyl) whereas the cyclohexenyl analog I (R = 1-cyclohexen-1-yl) was 530-fold selective at the A2 site. These compds. showed hypotensive activity in rat models over a range of doses without the bradycardia observed with less selective agonists.

IT 124498-89-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, adenosine receptor agonist, and antihypertensive activity of)
 RN 124498-89-1 CAPLUS
 CN Adenosine, 2-[[2-[4-(2-phenylethenyl)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)

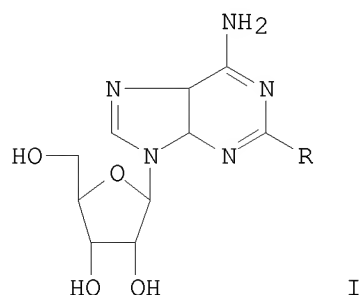
L3 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 1990:119353 CAPLUS
 DOCUMENT NUMBER: 112:119353
 ORIGINAL REFERENCE NO.: 112:20239a,20242a
 TITLE: Preparation of 2-substituted adenosine derivatives as antihypertensive and antiatherosclerotic agents and pharmaceutical compositions containing them
 INVENTOR(S): Hutchison, Alan J.; Francis, John E.
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
 SOURCE: Eur. Pat. Appl., 34 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 323807	A2	19890712	EP 1988-810900	19881229 <--
EP 323807	A3	19900620		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5034381	A	19910723	US 1988-193968	19880513 <--
NO 169843	B	19920504	NO 1988-5821	19881230 <--
NO 169843	C	19920812		
FI 8900028	A	19890708	FI 1989-28	19890104 <--
FI 90430	B	19931029		
FI 90430	C	19940210		
HU 48904	A2	19890728	HU 1989-33	19890105 <--
HU 202550	B	19910328		
ZA 8900084	A	19890830	ZA 1989-84	19890105 <--
DD 283402	A5	19901010	DD 1989-324859	19890105 <--
CA 1325209	C	19931214	CA 1989-587534	19890105 <--
DK 8900050	A	19890708	DK 1989-50	19890106 <--
AU 8927767	A	19890713	AU 1989-27767	19890106 <--
AU 618055	B2	19911212		
JP 01265100	A	19891023	JP 1989-590	19890106 <--
PRIORITY APPLN. INFO.:			US 1988-142055	A 19880107

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 112:119353

GI



AB The title compds. [I; R = NR₂CH₂CR₁R₃R₄, NR₂ (CH₂)_tR₅, tetrahydronaphthylalkylamino, etc.; R₁ = substituted phenyl; R₂ = H, alkyl; R₃ = H, alkyl, (substituted) Ph, OH; R₄ = H, alkyl; R₅ = cycloalkyl, bicycloheptenyl, etc.; t = 3, 4, 5], useful as antihypertensives and antiatherosclerotics (no data), are prepared 2-Chloroadenosine was heated with p-H₂NCH₂CH₂C₆H₄CH₂CH₂CO₂CMe₃ at 130° for 3 h to give I [R = NHCH₂CH₂C₆H₄CH₂CH₂CO₂CMe₃-p]. Ten thousand tablets (each containing 10 mg of the active ingredient) were prepared from 2-(2-cyclohexylethylamino)adenosine 100.00, lactose 2,400.00, corn starch 125.00, polyethyleneglycol 6,000 150.00, Mg stearate 40.00 g, and H₂O q.s.

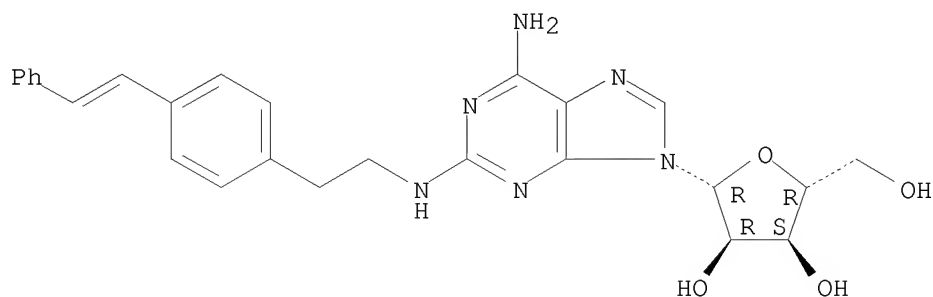
IT 124498-89-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antihypertensive and antiatherosclerotic)

RN 124498-89-1 CAPLUS

CN Adenosine, 2-[[2-[4-(2-phenylethenyl)phenyl]ethyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1990:77843 CAPLUS

DOCUMENT NUMBER: 112:77843

ORIGINAL REFERENCE NO.: 112:13327a,13330a

TITLE: Highly efficient synthesis of
oligodeoxyribonucleotides using
α-phenylcinnaoyl group for selective amino
protection

AUTHOR(S): Nagaich, Akhilesh K.; Misra, K.
CORPORATE SOURCE: Dep. Chem., Univ. Allahabad, Allahabad, 211002, India
SOURCE: Nucleic Acids Research (1989), 17(13),
5125-34
CODEN: NARHAD; ISSN: 0305-1048

DOCUMENT TYPE: Journal
LANGUAGE: English

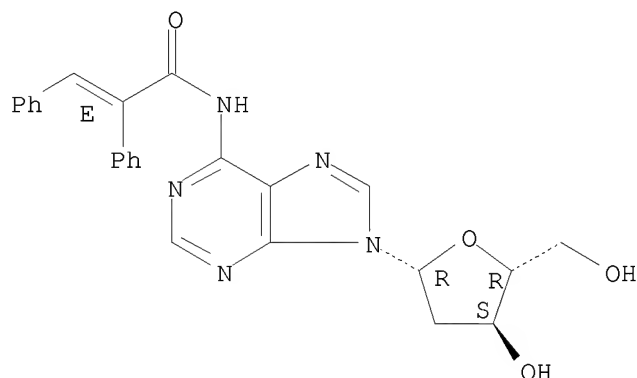
AB α -Phenylcinnamoyl group has been found to be highly selective for exocyclic amino function of all the three deoxynucleosides viz, 2'-deoxyadenosine, 2'-deoxyguanosine and 2'-deoxycytidine. The stereospecific nature of the group confers stability to the N-protected derivs. of 2'-deoxyadenosine and 2'-deoxyguanosine towards acids thereby minimizing depurination. The easy preparation and introduction of the group, stability of the protected monomers, milder conditions for deprotection resulting in negligible side products during synthesis and above all hydrophobicity of the group are the addnl. advantages.

IT 125249-29-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)

RN 125249-29-8 CAPLUS

CN Adenosine, 2'-deoxy-N-(1-oxo-2,3-diphenyl-2-propenyl)-, (E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

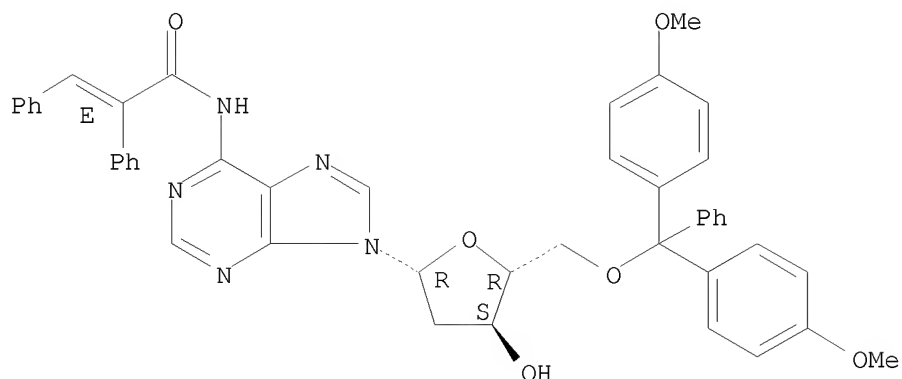


IT 125236-82-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for oligodeoxyribonucleotide synthesis)

RN 125236-82-0 CAPLUS

CN Adenosine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-2'-deoxy-N-(1-oxo-2,3-diphenyl-2-propenyl)-, (E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

=> FIL STNGUIDE
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ENTRY	SESSION
109.04	306.64

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CA SUBSCRIBER PRICE

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ENTRY	SESSION
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ENTRY	SESSION
1.04	307.68

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0.00	-14.79

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